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THE BOMBAY UNIVERSITY CALENDAR

FOR THE YEAR

1882-83.

BOMBAY:
THACKER & Co.
1882.

BOMBAY:
PRINTED AT THE GOVERNMENT CENTRAL PRESS.

CONTENTS.

		PAGE
I.	ALMANAC, April 1, 1882, to April 30, 1883 ...	1
II.	SCHEDULE OF EXAMINATIONS FOR 1882-83 ...	14*a*
III.	NOTIFICATIONS:—	

List of Books.

I.	*English.*	Previous Examination	15
		First B.A. Examination	15
		Second B.A. Examination ...	16
		M.A. Examination	16
II.	*Sanskrit.*	Previous Examination	17
		First B.A. Examination... ...	17
		Second B.A. Examination ...	17
		M.A. Examination	18
III.	*Greek.*	Previous Examination	18
		First B.A. Examination	19
		Second B.A. Examination ...	19
IV.	*Latin.*	Previous Examination	20
		First B.A. Examination	20
		Second B.A. Examination ...	20
		M.A. Examination	21
V.	*Hebrew.*	Previous Examination	21
		First B.A. Examination	21
		Second B.A. Examination ...	22
		M.A. Examination	22
VI.	*Arabic.*	Previous Examination	22
		First B.A. Examination	23

PAGE

Second B.A. Examination ... 23
M.A. Examination 23
VII. *Persian.* Previous Examination 24
First B.A. Examination 24
Second B.A. Examination ... 24
M.A. Examination 25

Periods of History.

Previous Examination 26
M.A. Examination 26

Books recommended in Law:

LL.B. Examination 27
Honours in Law Examination 28

Academic Costume 30

IV. —

Act XXII. of 1857, incorporating the University... 33
Act XLVII. of 1860 for conferring additional Degrees 42

V. By-Laws:—

I. Senate 43
II. Faculties 43
III. Syndicate 44
IV. Board of Accounts... 45
V. Registrar 46
VI. Meetings of the Senate 47
VII. Order of Business... 49
VIII. Rules of Debate 49

PAGE

IX. Elections 55
Endowments 55
University Terms 55

VI. REGULATIONS :—

I. Arts :—
Matriculation 57
The Previous Examination 59
First Examination for the Degree of Bachelor of Arts 61
Second Examination for the Degree of Bachelor of Arts 63
First Examination for the Degree of Bachelor of Science 67
Second Examination for the Degree of Bachelor of Science 73
Master of Arts 84

II. Law :—
Bachelor of Laws 86
Honours 87

III. Medicine :—
First Examination in Medicine 88
Examination for the Degree of L.M. & S. 90
Doctor of Medicine... 92

IV. Civil Engineering :—
First Examination in Civil Engineering 94
Examination for the Degree of L.C.E. ... 97
Master of Civil Engineering 104

General 104

PAGE

VII. FORM :—

I. Arts 105
II. Law 117
III Medicine 119
IV. Civil Engineering 127
The Munguldass Nathoobhoy Travelling Fellowship 132
The Bhugwandass Purshotumdass Sanskrit Scholarship 133
The Jam Shri Vibhaji Scholarship 133
The Hebbert and LaTouche Scholarship ... 134
The Rao Sir Pragmalji Scholarships 134
The Kahandas Mancharam Scholarship ... 134

VIII. ENDOWMENTS :—

I. The Munguldass Nathoobhoy Travelling Fellowship 135
II. The Manockjee Limjee Gold Medal ... 136
III. The Bhugwandass Purshotumdass Sanskrit Scholarship 139
IV. The Homejee Cursetjee Dady Prize ... 140
V. The Jugonnath Sunkersett Sanskrit Scholarships 142
VI. The Jam Shri Vibhaji Scholarship ... 145
VII. The Cowasjee Jehanghier Latin Scholarship 147
VIII. The Kinloch Forbes Gold Medal 148
IX. The David Sassoon Hebrew Scholarship ... 149
X. The James Berkley Gold Medal 151
XI. The Ellis Prize 152

PAGE
XII. The Hebbert and LaTouche Scholarship 154
XIII The Wilson Philological Lectureship ... 155
XIV. The Ellis Scholarship 157
XV. The Chancellor's Medal 158
XVI. The Arnould Scholarship 159
XVII. The Duke of Edinburgh Fellowship ... 160
XVIII. The Bai Maneckbai Byramjee Jeejeebhoy Prize 162
XIX. The Rao Sir Pragmalji Scholarships .. 162
XX. The Sir Jasvantsingji Scholarships ... 164
XXI. The Karsandas Mulji Prize 166
XXII. The Dossabhoy Hormusjee Cama Prize . 167
XXIII The Hughlings Prize 169
XXIV. The James Taylor Prize... 169
XXV. The Bhau Daji Prize 170
XXVI. The Venayekrao Jugonnathji Sunkersett Prize 171
XXVII. The Merwanjee Framjee Panday Scholarship 172
XXVIII. The Kabandas Mancharam Scholarship . 173
XXIX. The Dhirajlal Mathuradas Scholarship .. 175
XXX. The Sinclair Prize 176
XXXI. The Gibbs Prize 176
XXXII. The Narayan Vasudev Scholarship ... 177
XXXIII. The Cobden Club Medal 178
XXXIV. The Sir George LeGrand Jacob Scholarship 179
XXXV. The Sir George LeGrand Jacob Prize ... 180
XXXVI. The Jairazbhoy Peerbhoy Scholarship .. 181
XXXVII. The Varjivandas Madhavdas Sanskrit Scholarship 182

PAGE

IX. [illegible]ACTIONS :—

I. The Sir Cowasjee Jehanghier Hall of the University of Bombay... 184
II. University Arms and Common Seal ... 186
III. University Library 186
IV. The Rajabai Tower 187
V. University Mace 188

X. [illegible] :—

Senate 189
Deans 189
Syndicate 202
Board of Accounts 202
Registrar 202
Assistant Registrar and Librarian 202

Succession Lists :—

Chancellors 203
Vice-Chancellors 203
Deans :—
I. Deans in Arts 203
II. „ Law 204
III. „ Medicine 204
IV. „ Civil Engineering 205
Registrars 205
Deceased and retired Fellows 205
Graduates, M.A. 214
„ B.A. 218
„ B.Sc. 251

PAGE

Graduates, LL.B. 251
„ M.D. 254
„ L.M. 254
„ L.M. & S. 257
„ L.C.E. 260
Undergraduates and others who have passed the First Examination for the Degree of B.A. 265
Ditto First Examination of B.Sc. ... 266
Ditto First Examination in Arts ... 266
Ditto Previous Examination 274
Ditto First Examination in Medicine ... 278
Ditto First Examination in Civil Engineering 281
Matriculation Examination, 1881 285

XI.

Recognition 295
I. Elphinstone College 296
II. Deccan College 304
III. Free General Assembly's Institution, Bombay 310
IV. Bombay St. Xavier's College 312
V. Gujarát College... 315
VI. Rájárám College... 318
VII. Barodá College 320
VIII. Government Law School 322
IX. Grant Medical College 326
X. Poona College of Science 335

PAGE

XII. A Statement of Accounts of Endowments and Benefactions :—

Endowments 342
Benefactions 344

Results of Examinations of the University of Bombay for the year 1881-82 346

XIII. Convocation for conferring Degrees, 1881-82.

Convocation Report 347

Examination Papers, 1881-82 :—

Directions to Candidates ii
I. Matriculation Examination ... iii
II. Previous Examination xli
III. First Examination for the Degree of Bachelor of Arts lxiii
IV. Examination for the Degree of Bachelor of Arts... cii
V. First Examination for the Degree of Bachelor of Science ... clxiv
VI. Second Examination for the Degree of Bachelor of Science clxxi
VII. Examination for the Degree of M.A. clxxxix
VIII. Examination for the Degree of LL.B. ccxxxviii
IX. First Examination in Medicine ... ccl
X. Examination for the Degree of L.M. & S.... ccliv
XI. First Examination in Civil Engineering cclviii
XII. Examination for the Degree of L.C.E. cclxix

ABBREVIATIONS.

A	Ahmedábád High School.
Ah	Ahmednagar High School.
Ah M	Ahmedábád Irish Presbyterian Mission High School.
Ak.	Akolá High School
Am	Amráoti High School.
B Alf.	Bombay Alfred High School.
B K	Bahádurkhánji High School, Junágad.
B S	Baroda High School
B M.	Belgaum London Mission School.
B	Belgaum Sirdárs' High School.
Bh	Bhávnagar High School.
B A V.	Bhore Anglo-Vernacular School.
Bis	Bishop's High School, Poona.
B P	Bombay Private English School.
B Pro.	Bombay Proprietary School.
Br.	Broach High School.
B.T.	Byramjee Jeejeebhoy High School, Tháná.
Ch	Chandanvádi High School, Bombay.
C.Sc.	College of Science, Poona.
D	Deccan College.
Dh.	Dhárvád High School.
Dhu	Dhulıá High School.
E	Elphinstone College.
E S.	Elphinstone High School.
A V M	First Grade Anglo-Vernacular School, Miraj.
F	Fort High School
F G A.	Free General Assembly's Institution, Bombay.
G A.	Géneral Assembly's Institution, Bombay.
L	Government Law School.
G.	Grant Medical College
G C.	Gujarát College, Ahmedábád.
G M	Ghoghá Mission School
G K	Grammar School, Karáchi.
H	Haidarábad High School
H M.	Haidarabád Mission School.
I.	Indore English School
Ind	Indian High School, Bombay.
K M.	Karáchi Mission School.
K.	Kárwár High School.

ABBREVIATIONS.

Kat.	Káthiáwár High School.
N.J.	Náráyan Jagannáth High School, Karáchi.
N	Naríád High School.
N.S.	Násik High School.
N.E.	New English School, Poona.
P.E.	Poona Civil Engineering College.
P.M.	Poona Free Church Mission Institution.
P.	Poona High School.
P.N.	Poona Native Institution.
P.T.	Private Tuition.
P.V.	Poona Victoria School.
R.	Rájárám High School, Kolhápur.
R.C.	Rájárám College.
Rat.	Ratnágiri High School.
R.M.	Robert Money Institution, Bombay.
S.	Sátárá High School.
Sav.	Sávantvádi English School.
Sc.	Scottish High School, Byculla.
Sh.	Shikárpur High School.
Sir C.	Sir Cowasjee Jehánghier Navsári Madresá.
Sir J.	Sir Jamsetjee Jeejeebhoy Pársi Benevolent Institution.
St.M	St. Mary's Institution, Bombay.
St.M.P.	St. Mary's School, Poona.
St X.	St. Xavier's College.
Su.	Surat High School.
Su.M.	Surat Mission High School.

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I.

Bombay University Almanac.

APRIL 1, 1882, TO APRIL 30, 1883.

THE PROPERTY OF THE
HOME DEPT
OF THE GOVERNMENT OF INDIA

APRIL, 1882.

1	Sat.	
2	Sun.	
3	Mon.	
4	Tues.	Quarterly Meeting of the **Board of Accounts** at 4½ P.M.
5	Wed.	
6	Thurs.	
7	Fri.	
8	Sat.	
9	Sun.	
10	Mon.	
11	Tues.	
12	Wed.	
13	Thurs.	
14	Fri.	
15	Sat.	
16	Sun.	
17	Mon	First Term in Arts & Civil Engineering ends.
18	Tues.	
19	Wed.	
20	Thurs.	
21	Fri.	
22	Sat.	
23	Sun.	
24	Mon.	
25	Tues.	
26	Wed.	
27	Thurs.	
28	Fri.	
29	Sat.	
30	Sun.	First Term in Medicine ends.

MAY, 1882.

1	Mon.	
2	Tues.	
3	Wed.	
4	Thurs.	
5	Fri.	
6	Sat.	
7	Sun.	
8	Mon.	
9	Tues.	
10	Wed.	
11	Thurs.	
12	Fri.	
13	Sat.	
14	Sun.	
15	Mon.	
16	Tues.	
17	Wed.	
18	Thurs.	
19	Fri.	
20	Sat.	
21	Sun.	
22	Mon.	
23	Tues.	
24	Wed.	Queen Victoria born, 1819
25	Thurs.	
26	Fri.	
27	Sat.	
28	Sun.	
29	Mon.	
30	Tues.	
31	Wed.	

JUNE, 1882.

1	Thurs.	
2	Fri.	
3	Sat.	
4	Sun.	
5	Mon.	
6	Tues.	
7	Wed.	
8	Thurs.	
9	Fri.	
10	Sat.	
11	Sun.	
12	Mon.	Second Term in Arts and Civ. Eng begins.
13	Tues.	
14	Wed.	
15	Thurs.	Second Term in Medicine begins.
16	Fri.	
17	Sat.	
18	Sun.	
19	Mon.	
20	Tues.	Queen Victoria's accession, 1837.
21	Wed.	
22	Thurs.	
23	Fri.	
24	Sat.	
25	Sun.	
26	Mon.	*Last day of sending* in Essays for the Homejee Cursetjee Dady Prize, and notifying new subject.
27	Tues.	
28	Wed.	
29	Thurs.	
30	Fri.	Monthly Meeting of the **Syndicate** at 5¼ P.M.

JULY, 1882.

1	Sat.	
2	Sun.	
3	Mon.	
4	Tues.	Quarterly Meeting of the **Board of Accounts** at $4\frac{1}{2}$ P.M.
5	Wed.	
6	Thurs.	
7	Fri.	
8	Sat.	
9	Sun.	
10	Mon.	
11	Tues.	
12	Wed.	
13	Thurs.	
14	Fri.	
15	Sat.	
16	Sun.	
17	Mon.	*Last day for Application for* F.M. Examination
18	Tues.	UNIVERSITY OF BOMBAY INCORPORATED, 1857.
19	Wed.	
20	Thurs.	
21	Fri.	
22	Sat.	
23	Sun.	
24	Mon.	*Last day of sending* in Essays for the Karsandas Mulji Prize, the Dossabhoy Hormusjee Cama Prize, and the Sir George LeGrand Jacob Prize; and for notifying new subjects.
25	Tues.	
26	Wed.	
27	Thurs.	
28	Fri.	Monthly Meeting of the **Syndicate** at $5\frac{1}{4}$ P.M.
29	Sat.	
30	Sun.	
31	Mon.	

AUGUST, 1882.

1	Tues.	
2	Wed.	
3	Thurs.	
4	Fri.	
5	Sat.	
6	Sun.	
7	Mon.	
8	Tues.	
9	Wed.	
10	Thurs.	
11	Fri.	
12	Sat.	
13	Sun.	
14	Mon.	
15	Tues.	
16	Wed.	
17	Thurs.	
18	Fri.	
19	Sat.	
20	Sun.	
21	Mon.	*Last day of Application* for M.A. Examination.
22	Tues.	
23	Wed.	
24	Thurs.	
25	Fri.	Monthly Meeting of the **Syndicate** at 5¼ P.M.
26	Sat.	
27	Sun.	
28	Mon.	Last day of awarding the Homejee Cursetjee Dady Prize.
29	Tues.	
30	Wed.	
31	Thurs.	

SEPTEMBER, 1892.

1	Fri.	
2	Sat.	Question Papers for F.M. Examination due *from Examiners*
3	Sun.	
4	Mon.	
5	Tues.	UNIVERSITY OF MADRAS INCORPORATED, 1857.
6	Wed.	*Last day of Applications* for Previous, First B.A.,
7	Thurs.	First B.Sc., F.C.E., and L.C.E. Examinations.
8	Fri.	
9	Sat.	
10	Sun.	
11	Mon.	
12	Tues.	
13	Wed.	*Last day of Applications* for Second B.A. and
14	Thurs.	Second B.Sc. Examinations.
15	Fri.	Second Term in Medicine ends.
16	Sat.	
17	Sun.	
18	Mon.	Second Term in Arts and Civil Engineering
19	Tues.	ends. **Examination for F.M. begins.**
20	Wed.	*Last day of Applications* for Matriculation,
21	Thurs.	LL.B. and LL.B. Honours Examinations, and
22	Fri.	for the Rao Sir Pragmalji Scholarships.
23	Sat.	
24	Sun.	
25	Mon.	*Last day of sending* in Essays for the Manockjee Limjee Gold
26	Tues.	Medal; and for notifying new subject. Karsandas Mulji, Dossabhoy Hormusjee, and Sir George LeGrand Jacob Prizes awarded.
27	Wed.	*Last day of Application* for L.M. & S. and
28	Thurs.	M.C.E. Examinations.
29	Fri.	Monthly Meeting of the **Syndicate** at 5¼ P.M.
30	Sat.	

OCTOBER, 1882.

1	Sun.	
2	Mon.	F. M. Results declared.
3	Tues.	Quarterly Meeting of the **Board of Accounts** at 4½ P.M.
4	Wed.	*Last day of Application for* M.D. Examination.
5	Thurs.	
6	Fri.	
7	Sat.	
8	Sun.	
9	Mon.	
10	Tues.	
11	Wed.	
12	Thurs.	
13	Fri.	
14	Sat.	
15	Sun.	
16	Mon.	
17	Tues.	
18	Wed.	
19	Thurs.	
20	Fri.	
21	Sat.	
22	Sun.	
23	Mon.	Question Papers for Previous, First B.A., First B.Sc., F.C.E. and L.C.E. due *from Examiners.*
24	Tues.	
25	Wed.	
26	Thurs.	
27	Fri.	Monthly Meeting of the **Syndicate** at 5¼ P.M.
28	Sat.	
29	Sun.	
30	Mon.	
31	Tues.	

NOVEMBER, 1882.

1	Wed.	First Term in Medicine begins. Question Papers for Second B.A, and Second B.Sc. due *from Examiners.*
2	Thurs.	
3	Fri.	
4	Sat.	
5	Sun.	
6	Mon.	**Examinations for Previous, First B.A., First B.Sc., F.C.E., and L.C.E. begin;** Question Papers for M.A., LL.B., LL.B. Honours, and Matriculation Examinations due *from Examiners.*
7	Tues.	
8	Wed.	
9	Thurs.	
10	Fri.	
11	Sat.	
12	Sun.	
13	Mon.	**Second B.A. and Second B.Sc. Examinations begin.**
14	Tues.	
15	Wed.	
16	Thurs.	Question Papers for M.C.E. and L.M. & S. due *from Examiners.*
17	Fri.	
18	Sat.	
19	Sun.	
I. 20	Mon.	First Term in Arts and Civil Engineering begins. **Examinations for M.A., LL.B., LL.B. Honours, and Matriculation begin;** Previous, First B.A. and First B.Sc. Results declared.
21	Tues.	
22	Wed.	
23	Thurs.	Question Papers for M.D. due *from Examiners.* F.C.E. and L.C.E. Results declared.
24	Fri.	Monthly Meeting of the **Syndicate** at 5¼ P.M.
25	Sat.	
26	Sun.	
II. 27	Mon.	**Examinations for M.C.E. and L.M. & S. begin;** Second B.A. and Second B.Sc. Results declared; Manockjee Limjee Gold Medal awarded.
28	Tues.	
29	Wed.	
30	Thurs.	

DECEMBER, 1882.

	1	Fri.	LL.B. Honours Results declared.
	2	Sat.	M.A. Results declared.
	3	Sun.	
III.	4	Mon.	**M.D. Examination begins.** LL.B. Results declared. *Last day of announcing* the Jam Shri Vibhaji and Hebbert and LaTouche Scholarships, when vacant.
	5	Tues.	
	6	Wed.	
	7	Thurs.	
	8	Fri.	
	9	Sat.	
	10	Sun.	
IV.	11	Mon.	L.M. & S. and M.C.E. Results declared.
	12	Tues.	
	13	Wed.	
	14	Thurs.	
	15	Fri.	
	16	Sat.	Annual Meeting of the Senate.
	17	Sun.	
V.	18	Mon.	Matriculation and M.D. Results declared.
	19	Tues.	
	20	Wed.	
	21	Thurs.	
	22	Fri.	Monthly Meeting of the **Syndicate** at 5¼ P.M.
	23	Sat.	
	24	Sun.	
	25	Mon.	Christmas Day.
	26	Tues.	
	27	Wed.	
	28	Thurs.	
	29	Fri.	*Last day of Application* for the Jam Shri Vibhaji and Hebbert and LaTouche Scholarships.
	30	Sat.	
	31	Sun.	

JANUARY, 1883.

1	Mon.	
2	Tues.	Quarterly Meeting of the **Board of Accounts** at 4½ P.M.
3	Wed.	
4	Thurs.	
5	Fri.	*Last day of Application* for Degrees.
6	Sat.	
7	Sun.	
8	Mon.	
9	Tues.	
10	Wed.	
11	Thurs.	
12	Fri.	
13	Sat.	
14	Sun.	
15	Mon.	
16	Tues.	Admission to Degrees.
17	Wed.	
18	Thurs.	
19	Fri.	
20	Sat.	
21	Sun.	
22	Mon.	
23	Tues.	
24	Wed.	UNIVERSITY OF CALCUTTA INCORPORATED, 1857.
25	Thurs.	
26	Fri.	Monthly Meeting of the **Syndicate** at 5¼ P.M.
27	Sat.	Jam Shri Vibhaji and Hebbert and LaTouche Scholarships adjudged.
28	Sun.	
29	Mon.	
30	Tues.	
31	Wed.	

FEBRUARY, 1883.

1	Thurs.	
2	Fri.	
3	Sat.	
4	Sun.	
5	Mon.	
6	Tues.	
7	Wed.	
8	Thurs.	
9	Fri.	
10	Sat.	
11	Sun.	
12	Mon.	
13	Tues.	
14	Wed.	
15	Thurs.	
16	Fri.	
17	Sat.	
18	Sun.	
19	Mon.	
20	Tues.	
21	Wed.	
22	Thurs.	
23	Fri.	Monthly Meeting of the **Syndicate** at 5¼ P.M.
24	Sat.	
25	Sun.	
26	Mon.	
27	Tues.	
28	Wed.	

MARCH, 1883.

1	Thurs.	
2	Fri.	
3	Sat.	
4	Sun.	
5	Mon.	
6	Tues.	
7	Wed.	
8	Thurs.	
9	Fri.	
10	Sat.	
11	Sun.	
12	Mon.	
13	Tues.	
14	Wed.	
15	Thurs.	
16	Fri.	
17	Sat.	
18	Sun.	
19	Mon.	
20	Tues.	
21	Wed.	
22	Thurs.	
23	Fri.	
24	Sat.	
25	Sun.	
26	Mon.	
27	Tues.	
28	Wed.	
29	Thurs.	
30	Fri.	Monthly Meeting of the **Syndicate** at 5¼ P.M.
31	Sat.	

APRIL, 1883

1	Sun.	
2	Mon.	
3	Tues.	Quarterly Meeting of the **Board of Accounts** at $4\frac{1}{2}$ P.M.
4	Wed.	
5	Thurs.	
6	Fri.	
7	Sat.	
8	Sun.	
9	Mon.	
10	Tues.	
11	Wed.	
12	Thurs.	
13	Fri.	
14	Sat.	
15	Sun.	
16	Mon.	First Term in Arts & Civil Engineering ends.
17	Tues.	
18	Wed.	
19	Thurs.	
20	Fri.	
21	Sat.	
22	Sun.	
23	Mon.	
24	Tues.	
25	Wed.	
26	Thurs.	
27	Fri.	
28	Sat.	
29	Sun.	
30	Mon.	First Term in Medicine ends

Schedule of Examinations for 1882-83.

Examinations.	Candidates' Applications due.	Examiners' Question Papers due.	Examinations begin on	List of Marks due.	Results published on
F.M.	18th July	2nd Sept.	18th Sept.	29th Sept.	2nd Oct.
Previous Examination	6th Sept.	23rd Oct.	6th Nov.	17th Nov.	20th Nov.
First B.A.	6th ,,	23rd ,,	6th ,,	17th ,,	20th ,,
First B.Sc.	6th ,,	23rd ,,	6th ,,	17th ,,	20th ,,
F.C.E.	6th ,,	23rd ,,	6th ,,	20th ,,	23rd ,,
L.C.E.	6th ,,	23rd ,,	6th ,,	20th ,,	23rd ,,
M.A.	21st Aug.	6th Nov.	20th ,,	30th ,,	2nd Dec.
LL.B. Honours	20th Sept.	6th ,,	20th ,,	30th ,,	1st ,,
LL.B.	20th ,,	6th ,,	20th ,,	2nd Dec.	4th ,,
Matriculation	20th ,,	6th ,,	20th ,,	13th ,,	18th ,,
B.Sc.	13th ,,	1st ,,	13th ,,	26th Nov.	27th Nov.
Second B.A.	13th ,,	1st	13th ,,	26th ,,	27th ,,
M.C.E.	27th ,,	16th ,,	27th ,,	8th ,,	11th Dec.
L.M. & S.	27th ,,	16th ,,	27th ,,	8th ,,	11th ,,
M.D.	4th Oct.	23rd ,,	4th Dec.	15th ,,	18th ,,

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III.

LIST OF BOOKS FOR 1882 AND 1883.

I.—ENGLISH.

FOR THE PREVIOUS EXAMINATION.

1882.

1. SOUTHEY—Life of Nelson.
2. SCOTT—Marmion.

1883.

1. SOUTHEY—Life of Nelson.
2. SCOTT—Rokeby.

FOR THE FIRST B.A. EXAMINATION.

1882.

1. SHAKESPEARE—Othello.
2. MILTON—Paradise Lost, Books III., IV.
3. THE GOLDEN TREASURY, Book IV.
4. BURKE—Reflections on the French Revolution.

1883.

1. SHAKESPEARE—Richard III.,
2. MILTON—Paradise Regained, Books I., II.
3. THE GOLDEN TREASURY, Book IV.
4. BURKE—Reflections on the French Revolution.

1884.

1. SHAKESPEARE—Henry VIII.
2. MILTON—Paradise Regained, Books III, IV.
3. THE GOLDEN TREASURY, Book IV
4. BURKE—Reflections on the French Revolution.

FOR THE SECOND B.A. EXAMINATION.

1882, 1883, 1884

(1.)—NECESSARY.

BACON—Advancement of Learning.

(2). GROUP A. (LANGUAGE AND LITERATURE.)

1. COWPER—The Letters of Cowper (the second and third volumes of Bohn's Edition).
2. POPE—Moral Essays and Satires.

FOR THE M.A. EXAMINATION.

1882.

1. SPENSER—Faery Queene, Book I.
2. SHAKESPEARE—Julius Cæsar ; The Tempest ; Hamlet.
3. WORDSWORTH—Selections by Matthew Arnold
4. CARLYLE—French Revolution.
5. SIR THOMAS BROWNE—Religio Medici.

1883.

1. SPENSER—Faery Queene, Book I.
2. SHAKESPEARE—Richard III ; The Tempest ; Lear
3. WORDSWORTH—Selections by Matthew Arnold.
4. COLERIDGE—Biographia Literaria, I.—XIII.
5. HOOKER—Ecclesiastical Polity, Book I

1884.

1. SPENSER—Faery Queene, Book I.
2. SHAKESPEARE—Julius Cæsar, The Tempest ; Hamlet
3. WORDSWORTH—Selections by Matthew Arnold.
4. CARLYLE—French Revolution.
5. SIR THOMAS BROWNE—Religio Medici.

II.—SANSKRIT.

FOR THE PREVIOUS EXAMINATION.

1882.

1. Vikramorvas'î.
2. Raghuvans'a, I.—V.

1883.

1. S'akuntalâ, I.—IV.
2. Raghuvans'a, VI.—X.

FOR THE FIRST B.A. EXAMINATION.

1882.

1. Uttararâmacharita.
2. Kâdambarî, pp. 102—175 of the Bombay Edition.
3. Rigveda :—

Maṇḍala I.—Hymns		19, 25.
II.	"	12, 28.
III.		9, 34, 42, 61.
IV.		46, 54.
V.		1, 25, 26.
VI.		53, 54, 55, 56, 57, 58.
VII.		67, 68, 69, 86, 88, 89.
X.		10, 18, 81, 90, 121, 129, 168.

4. Tarkasangraha.

1883.

1. Mâlatî Mâdhava.
2. Kâdambarî, pp. 168—237.
3. Rigveda, as for 1882.
4. Tarkasangraha.

FOR THE SECOND B.A. EXAMINATION.

1882, 1883.

(1.)—NECESSARY.

Kâvya Prakâs'a, I., II., X.

(2.) GROUP A. (LANGUAGE AND LITERATURE)

S'ankarâchârya's Vedânta Sûtra Bhâshya, Chap. I., Pâda IV., and Chap. II., Pâda I.
2. Mṛichchakaṭikâ and Mudrârâkshasa.

FOR THE M A. EXAMINATION

1882, 1883.

I. (*a.*)—Ṛigveda. The Seventh Maṇḍala with the Commentary of Sâyana.
(*b.*)—Yâska's Nirukta, I.—VII.

II.—One of the following four:—

1. Nyâyas'âstra.
viz. : (*a.*)—Tarkasangraha with Dîpikâ.
(*b.*)—Muktâvalî.
(*c.*)—Gautamasûtra with Vâtsyâyana's Bhâshya.

2. Dharma-s'âstra.
viz. :(*a.*)—Mitâksharâ.
(*b.*)—Vyavahâra-Mayûkha.
(*c.*)—Vîramitrodaya—Vyavahârakâṇḍa.

3. Vyâkaraṇa-s'âstra.
viz. : (*a.*)—Siddhânta Kaumudî. Mahâbhâshya, Chap. I. Pâda I, Âhnikas I.—V.
(*b.*)—Paribhâshenduś'ekhara.

4. Vedânta-s âstra.
viz : (*a.*)—Vedântasâra.
(*b*)—Vedântaparibhâshâ.
(*c.*)—S ankarâchârya's S ârîrabhâshya.

III.—GREEK.

FOR THE PREVIOUS EXAMINATION.

1882.

1. XENOPHON—Anabasis, I.
2. HOMER—Iliad, I.

1883.

1. XENOPHON—Anabasis, II.
2. HOMER—Iliad, II.

1884

1. XENOPHON—Anabasis I.
2. HOMER—Iliad I.

FOR THE FIRST B.A. EXAMINATION.

1882.

1. HERODOTUS—I., II.
2. EURIPIDES—Medea.
3. DEMOSTHENES—The Philippics.

1883.

1. HERODOTUS—III., IV.
2. EURIPIDES—Hecuba.
3 DEMOSTHENES—The Philippics.

1884

1. HERODOTUS—V., VI.
2. EURIPIDES—Electra.
3 DEMOSTHENES—The Philippics.

FOR THE SECOND B.A. EXAMINATION.

1882, 1883, 1884

(1.) NECESSARY

THUCYDIDES—I.—IV.

(2.)—GROUP A. (LANGUAGE AND LITERATURE.)

1. ÆSCHYLUS—Agamemnon.
2. SOPHOCLES—Antigone, Œdipus Coloneus.

IV.—LATIN.

FOR THE PREVIOUS EXAMINATION.

1882.

1. LIVY—Book I.
2. OVID—Metamorphoses, Book I.

1883.

1. LIVY—Book II.
2. OVID—Metamorphoses, Book II.

1884.

1. LIVY—Book III.
2. OVID—Metamorphoses, Book III.

FOR THE FIRST B.A. EXAMINATION.

1882.

1. CICERO—De Officiis.
2. LIVY—Book XXII.
3. VIRGIL—Georgics I. and II.

1883.

1. CICERO—De Senectute, De Amicitia.
2. VIRGIL—Æneid, I.—II.
3. TACITUS—Annales I.

1884.

1. CICERO—De Officiis.
2. VIRGIL—Æneid, III.—IV.
3. TACITUS—Annales XI.

FOR THE SECOND B.A. EXAMINATION.

(1.)—NECESSARY.

1882, 1883, 1884.

HORACE—Epistles and Satires.

(2.)—GROUP A. (LANGUAGE AND LITERATURE.

HORACE.

FOR THE M.A. EXAMINATION.

1882, 1884.

1. TACITUS—Annales, I.—VI.
2. CICERO—Epistolæ ad Atticum, IV.—VI.
3. TERENCE—Heautontimorumenos.
4. LUCRETIUS, I.—III.

1883.

1. TACITUS—Historiæ.
2. CICERO—Epistolæ ad Atticum, I.—III.
3. PLAUTUS—Captivi.
4. JUVENAL—Satires, I., III., IV., V., VII.

V.—HEBREW.

FOR THE PREVIOUS EXAMINATION.

1882.

1. GENESIS—XI.—XX.
2. PSALMS—XXXI.—LX.

1883.

1. GENESIS—I.—X.
2. PSALMS, I.—XXX.

FOR THE FIRST B.A. EXAMINATION.

1882.

1. GENESIS.
2. RUTH.
3. ISAIAH—I.—XXXIX.

1883.

1. EXODUS.
2. RUTH.
3. ZECHARIAH.

FOR THE SECOND B.A. EXAMINATION.

(1.)—Necessary.

1882

Ezra—With the Chaldee passages.

1883.

Hosea and Joel.

(2.)—Group A. (Language and Literature.)

1. Exodus, Leviticus, Deuteronomy.
2. Psalms—I.—LXXII.

FOR THE M.A. EXAMINATION.

1882.

1. Ecclesiastes.
2. I. Kings.
3. Nahum and Habukkuk.
4. Ezekiel—XXV.—XLVIII.

VI.—ARABIC.

FOR THE PREVIOUS EXAMINATION.

1882

1. Alf Lailah-wa-Lailat—Nights I.—X.
2 Nafhat-ul-Yamin—Bab I.

1883.

1. Alf Lailah-wa-Lailat—Nights XI.—XX.
2. Nafhat-ul-Yamin—Bab II.

FOR THE FIRST B.A. EXAMINATION.

1882.

1. ALF LAILAH-WA-LAILAT—Nights LI.—LXX.
2. SHAHRISTANI—Pages 51—100.
3. MOALLAKAT—Antara.

1883.

1. ALF LAILAH-WA-LAILAT—Nights I.—XXX.
2. SHAHRISTANI—Pages 1—50.
3. MOALLAKAT—Lebid.

FOR THE SECOND B.A. EXAMINATION.

1882.

(1.)—NECESSARY.

MAKAMAT—Sessions I.—XX.

(2.)—GROUP A. (LANGUAGE AND LITERATURE.)

1. WAKEDI—Fotoohat-ush-Sham.
2. DIVAN-EL-MOTANABBI—pp. 2—146 (Bombay Edition).

1883.

(1.)—NECESSARY.

MAKAMAT—Sessions XXI.—XL.

(2.)—GROUP A. (LANGUAGE AND LITERATURE.)

1. WAKEDI—Fotoohat-ush-Sham.
2. DIVAN-EL-MOTANABBI—pp. 147—292 (Bombay Edition).

FOR THE M.A. EXAMINATION.

1882.

1. OTBEE—History of Mahmud of Ghazni, Book I.
2. ALF LAILAH-WA-LAILAT—Nights CCI.—CCC.
3. HAMASAH—Pages 150—301 (Freytag's Edition).
4. MOALLAKAT—Zohair and Lobaid.

1883.

1. OTBEE—History of Mahmud of Ghazni, Book II.
2. ALF LAILAH-WA-LAILAT—Nights C.—CC.
3. HAMASAH—Pages 1—151 (Freytag's Edition).
4. MOALLAKAT—Amrulkais and Tarafa.

VII.—PERSIAN.

FOR THE PREVIOUS EXAMINATION.

1882.

1. DIVAN-I-HAFIZ—Odes LX.—CX.
2. ANWAR-I-SUHAILI—Chapters V. and VI.

1883.

1. DIVAN-I-HAFIZ—Odes CX.—CLX.
2. ANWAR-I-SUHAILI—Chapters VII. and VIII.

FOR THE FIRST B.A. EXAMINATION.

1882.

1. DIVAN-I-HAFIZ—Odes CLI.—CC.
2. FERISHTA—Humayun.

1883.

1. DIVAN-I-HAFIZ—Odes CCI.—CCL.
2. FERISHTA—Abrahim the Second of the Adilshah dynasty.

FOR THE SECOND B.A. EXAMINATION.

(1.)—NECESSARY.

1882.

RAUZAT-US-SAFA—From the commencement of Creation to the life of Ayoob.

Or

HABEEB OS-SEAR.—First Portion of the First Volume (from the commencement of Creation to the Lives of Philosophers, inclusive).

1883.

RAUZAT-US-SAFA—From the life of Ayoob to the reign of Kyumarth.

Or

HABEEB-OS-SEAR—Second Portion of the First Volume (History of the ancient Persian and Arabic Kings down to the Mohammedan Era).

(2)—GROUP A. (LANGUAGE AND LITERATURE.)

1882, 1883.

1. MIRKHOND—Rauzat-us-Safa V.
2. HAJI LUTFALY—Atashkada, pp. 25 to 141 in the Bombay Edition.

Or, instead of 1,

1. HABEEB-OS-SEAR.—First Portion of the Third Volume (Changuiz Khán and his descendants).

FOR THE M.A EXAMINATION.

1882.

1. FIRDAUSI—Shahnamah; from the birth of Nushzad, son of Nushirwan, till the sending of Berzuyah the Physician to India.
2. BANI OMAYA (2nd portion of the Second Volume of Habeeb-os-Sear, Bombay Edition)
3. RAUZAT-US-SAFA—Chengiz Khan (beginning of 5th Vol.)
4. MESNAVI OF JELLAL-UDDIN-RUMI—Daftar II.

1883.

1 FIRDAUSI—Shahnamah, from the visit of Behram to Shankal the Padshah of Hind, till the birth of Nushzad, son of Nashirwan
2 BANI ABBAS (3rd portion of the Second Volume of Habeeb-os-Sear, Bombay Edition)
3 RAUZAT-US-SAFA—Sassanian Dynasty of last part of Vol I.
4 MESNAVI OF JELLAL-UDDIN-RUMI—Daftar I.

PERIODS OF HISTORY.

FOR THE PREVIOUS EXAMINATION.

1882

GREEK HISTORY—From the accession of Philip of Macedon to the death of Alexander

1883

GREEK HISTORY—The Peloponnesian War.

FOR THE M.A. EXAMINATION.

1882

WESTERN EUROPE —From the Meeting of the States General at Versailles in 1789 to the Fall of the Second Empire

1883

WESTERN EUROPE.—From the Peace of Westphalia to the Meeting of the States General at Versailles, 1789

1884.

WESTERN EUROPE.—From the Meeting of the States General at Versailles in 1789 to the Fall of the Second Empire

BOOKS RECOMMENDED IN LAW.

I.—FOR THE DEGREE OF BACHELOR OF LAWS.

1. Markby's Elements of Law.
2. Justinian (Sandar's edition recommended).
3. Maine's Ancient Law.
4. Kent's International Law.
5. Succession Act (Stokes' edition recommended).
6. Pársi Succession Act.
7. Hindu Wills Act.
8. Indian Majority Act.
9. Macnaghten's Principles of Mahomedan Law.
10. Sir T. Strange's Hindu Law.
11. Mayne's Hindu Law.
12. Contract Act (Cunningham and Shepherd's edition recommended).
13. Registration Act.
14. Pollock's Law of Contracts.
15. Smith's Mercantile Law.
16. Specific Relief Act.
17. Snell's Equity.
18. The following selection from White and Tudor's Leading Cases in Equity :—

    Cuddee *vs.* Rutter.
    Ellison *vs.* Ellison.
    Fox *vs.* Mackreth.
    Glenorchy *vs.* Bosville.
    Keech *vs.* Sandford.
    Pusey *vs.* Pusey.
    Russell *vs* Russell.
    Bassett *vs.* Nossworthy.
    Brice *vs.* Stokes.
    Howard *vs* Harris.
    Huguenin *vs.* Baseley.
    Robinson *vs* Pett.
    Seton *vs.* Slade
    Woollam *vs.* Hearn.

19. Penal Code (Mayne's edition recommended).
20. Broom's Commentaries on the Common Law, Books III. and IV.
21. Evidence Act (Cunningham's edition recommended).

22. Civil Procedure Code.
23. Limitation Act.
24. Criminal Procedure Code.

II.—ADDITIONAL FOR HONOURS.

1. Austin's Jurisprudence.
2. Gaius (Poste's edition recommended).
3. Wheaton's International Law.
4. Domat's Civil Law.
5. Story's Conflict of Laws.
6. Tagore Lectures on Mahomedan Law, and parts of Mitâksharâ and Mayukha relating to Succession and Partition.
7. Pollock's Law of Partnership.
8. The following selection from Tudor's Leading Cases on Mercantile Law :—

    Birkley *vs.* Preograve.
    Chase *vs.* Westmore.
    Clayton's Case.
    Don *vs.* Lippmann.
    Dixon *vs.* Sadler.
    Forbes *vs.* Aspinall.
    Gratitudine, The.
    Hanson *vs.* Meyer.
    Harman *vs.* Fisher.
    Johnson *vs.* Sheddon.
    Croft *vs.* Day.
    Joy *vs.* Campbell.
    Market Overt Case.
    Roux *vs.* Salvador.
    Rowlandson, *Ex parte.*
    Tyrie *vs.* Fletcher.
    Whitehead *vs.* Anderson.
    Woolridge *vs.* Boydell.
    Worseley *vs.* DeMattos.

9. The following selection from White and Tudor's Leading Cases in Equity :—

    Aleyn *vs.* Belchier.
    Elliot *vs.* Merryman,
    Dyer *vs.* Dyer.
    Lake *vs.* Cradock.
    Mackreth *vs.* Symmons.

Tollet *vs.* Tollet.
Casborne *vs.* Scarfe.
Harding *vs.* Glynn.
Le Neve *vs.* Le Neve.
Peachy *vs.* Duke of Somerset
Rees *vs.* Berrington.
Ryall *vs.* Rowles.
Stapilton *vs* Stapilton.
Townley *vs.* Sherborne.
Penn *vs.* Lord Baltimore.

10 Story's Equity Jurisprudence.
11 Addison on Torts.
12 Bentham's Principles of Morals and Legislation.
13. Best on Evidence.

ACADEMIC COSTUME

1. Academic Costume is worn at Convocations for conferring Degrees

2. Such of the Fellows of the University of Bombay as are Graduates of other Universities, or as are entitled to wear official* costume or uniform, may appear in the academic dress of their own Universities, or in such costume or uniform, wearing in addition the Fellow's Scarf of the University of Bombay.

3 Other Fellows wear the Fellow's Gown and Scarf of the University of Bombay. The head-dress of the European Fellows is a College Cap

Academic Costume to be worn by the Senate and Graduates of the University of Bombay.

CHANCELLOR.

GOWN —Black damask silk with gold lace and tufts.
CAP —Black velvet Academic Cap with gold tassel.

VICE-CHANCELLOR

GOWN.—The same, but with silver lace and tufts.
CAP —The same, but with silver tassel

REGISTRAR

GOWN —The same, but with black silk lace and tufts.
CAP —Black cloth Academic Cap with black silk tassel

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* *Ex. g* Judges, Bishops, Barristers, Military and Naval Officers, &c

Fellows.

Gown —Bishop's purple silk with full sleeves.
Scarf —Of the same colour with gold fringed ends.

Graduates.

B.A

Gown.—Black silk or stuff, shape as Oxford B A.
Hood —Black stuff, bound with garter blue silk, one inch wide.

M.A.

Gown.—Black silk or stuff, as Oxford M.A.
Hood.—Garter blue silk, lined the same.

LL B.

Gown.—Black silk or stuff, as M.A.
Hood.—Black silk with scarlet cloth band inside, two inches wide, shape as Cambridge M.A.

L.M. & S.

Gown.—Black silk or stuff, as B.A.
Hood.—Black stuff, bound with crimson silk, one inch wide.

M.D.

Gown.—*Undress*, black silk or stuff, as M.A.
Full dress, crimson silk, garter blue facings, shape as M.A.
Hood.—Crimson silk, lined garter blue.

L.C.E.

GOWN —Black silk or stuff, shape as B.A.
HOOD —Black stuff, bound with brown silk, one inch wide.

M.C E

GOWN —Black silk or stuff, as M A
HOOD —Brown silk, lined garter blue.

CAP.—For all European Fellows or Graduates—
Black cloth Academic Cap with black silk tassel

IV.

Acts.

ACT OF INCORPORATION.

ACT NO. XXII. OF 1857.

PASSED BY THE LEGISLATIVE COUNCIL OF INDIA.

(Received the Assent of the Governor General on the 18th July 1857.)

AN ACT *to establish and incorporate a University at Bombay.*

Preamble.

WHEREAS, for the better encouragement of Her Majesty's subjects of all classes and denominations within the Presidency of Bombay and other parts of India in the pursuit of a regular and liberal course of education, it has been determined to establish a University at Bombay for the purpose of ascertaining, by means of examination, the persons who have acquired proficiency in different branches of Literature, Science, and Art, and of rewarding them by Academical Degrees as evidence of their respective attainments, and marks of honour proportioned thereunto; and whereas, for effectuating the purposes aforesaid, it is expedient that such University

should be incorporated: It is enacted as follows · (that is to say)—

Incorporation.

1 The following persons, namely, The Right Honourable JOHN, LORD ELPHINSTONE, Governor of Bombay,

The Honourable Sir WILLIAM YARDLEY, Knight, Chief Justice of the Supreme Court of Judicature at Bombay,

The Right Reverend JOHN HARDING, Doctor of Divinity, Bishop of Bombay, *Ex officio*,

The Honourable Sir HENRY SOMERSET, Lieutenant-General, Knight Companion of the Most Honourable Order of the Bath, Commander-in-Chief of the Forces in Bombay, *Ex officio*,

The Honourable JAMES GRANT LUMSDEN, Member of the Council of Bombay, *Ex officio*,

The Honourable ARTHUR MALET, Member of the Council of Bombay, *Ex officio*,

EDWARD IRVINE HOWARD, Esquire, Director of Public Instruction, Presidency Division, *Ex officio*,

ROBERT HAINES, Esquire, M.B, Acting Educational Inspector, Presidency Division, *Ex officio*,

C MOREHEAD, Esquire, M.D., Principal of the Grant Medical College, *Ex officio*,

JOHN HARKNESS, Esquire, LL.D., Principal of the Elphinstone College, *Ex officio*,

The Reverend JAMES MCDOUGALL, Acting Principal of the Poona College, *Ex officio*,

PHILIP WILLIAM LEGEYT, Esquire, Member of the Legislative Council of India,

The Honourable Sir MATTHEW RICHARD SAUSSE, Knight, Puisne Judge of the Supreme Court of Judicature at Bombay,

Sir JAMSETJEE JEEJEEBHOY, Knight,

METCALF LARKEN, Esquire, Judge of the Sudder Court in Bombay, and President of the late Board of Education,

JUGONNATH SUNKERSETT, Esquire, Member of the late Board of Education,

BOMANJEE HORMUSJEE, Esquire, Member of the late Board of Education,

BHAO DAJEE, Esquire, Graduate of the Grant Medical College, Member of the late Board of Education,

MATTHEW STOVELL, Esquire, Surgeon in the Bombay Army, Secretary to the late Board of Education,

CLAUDIUS JAMES ERSKINE, Esquire, Civil Service, late Director of Public Instruction,

WILLIAM EDWARD FRERE, Esquire, Member of the Royal Asiatic Society, and President of the Bombay Branch of the Royal Asiatic Society, Judge of the Sudder Court in Bombay,

Major-General CHARLES WADDINGTON, Companion of the Most Honourable Order of the Bath, Chief Engineer of Public Works,

The Reverend JOHN WILSON, Doctor of Divinity, Fellow of the Royal Society, Honorary President of the Bombay Branch of the Royal Asiatic Society,

The Reverend PHILIP ANDERSON, Master of Arts, Chaplain on the Bombay Establishment,

HENRY BARTLE EDWARD FRERE, Esquire, Commissioner in Sind,

Lieutenant EDWARD FREDERICK TIERNEY FERGUSSON, Indian Navy,

MAHOMED YUSOOF MOORGAY, Cazee of Bombay,

JAMES JOHN BERKLEY, Esquire, Fellow of the Geographical Society, M I C.E., President of the Bombay Mechanics' Institute, and Chief Resident Engineer of the Great Indian Peninsula Railway Company,

HENRY LACON ANDERSON, Esquire, Secretary to Government,

Being the first Chancellor, Vice-Chancellor, and Fellows of the said University, and all the persons who

may hereafter become or be appointed to be Chancellor, Vice-Chancellor, or Fellows as hereinafter mentioned, so long as they shall continue to be such Chancellor, Vice-Chancellor, or Fellows, are hereby constituted and declared to be one Body Politic and Corporate by the name of the University of Bombay; and such Body Politic shall by such name have perpetual succession and shall have a common Seal, and by such name shall sue and be sued, implead and be impleaded, and answer and be answered unto, in every Court of Justice within the territories in the possession and under the Government of the East India Company.

Power to hold and dispose of property.

II The said Body Corporate shall be able and capable in law to take, purchase, and hold any property, moveable or immoveable, which may become vested in it for the purposes of the said University, by virtue of any purchase, grant, testamentary disposition, or otherwise; and shall be able and capable in law to grant, demise, alien, or otherwise dispose of all or any of the property, moveable or immoveable, belonging to the said University; and also to do all other matters incidental or appertaining to a Body Corporate.

Constitution of Body Corporate.

III The said Body Corporate shall consist of one Chancellor, one Vice-Chancellor, and such number of *ex-officio* and other Fellows as the Governor of Bombay in Council hath already appointed, or shall from time to time, by any order published in the *Bombay Gazette*, hereafter appoint: and the Chancellor, Vice-Chancellor, and Fellows for the time being shall constitute the Senate of the said University. Provided, that if any person being Chancellor, Vice-Chancellor, or Fellow of the said University, shall leave India without the intention of returning thereto, his office shall thereupon become vacant.

Senate.

Office vacated by leaving India.

Chancellor.

IV. The Governor of Bombay for the time being shall be the Chancellor of the said University, and the first Chancellor shall be the Right Honourable JOHN, LORD ELPHINSTONE.

Vice-Chancellor.

V The first Vice-Chancellor of the said University shall be Sir WILLIAM YARDLEY, Knight. The office of Vice-Chancellor shall be held for two years only ; and the Vice-Chancellor hereinbefore nominated shall go out of office on the 1st day of January 1859. Whenever a vacancy shall occur in the office of Vice-Chancellor of the said University by death, resignation, departure from India, effluxion of time, or otherwise, the Governor of Bombay in Council shall, by notification in the *Bombay Gazette*, nominate a fit and proper person, being one of the Fellows of the said University, to be Vice-Chancellor in the room of the person occasioning such vacancy. Provided that, on any vacancy in the said office which shall occur by effluxion of time, the Governor of Bombay in Council shall have power to re-appoint the Vice-Chancellor hereinbefore nominated, or any future Vice-Chancellor to such office.

Fellows.

VI. The Chief Justice of Her Majesty's Supreme Court of Judicature, the Bishop of Bombay, the Members of the Council of Bombay, the Director or Acting Director of Public Instruction, the Educational Inspector or Acting Educational Inspector of the Presidency Division, the Principals and Acting Principals of Government Colleges, all for the time being, shall, while filling such Offices, be *ex-officio* Fellows of the said University. The whole number of the Fellows of the said University, exclusive of the Chancellor and Vice-Chancellor for the time being, shall never be less than twenty-six ; and whenever the number of the said Fellows, exclusive as aforesaid, shall by death, resignation, departure from India, or otherwise, be reduced below twenty-six, the Governor of Bombay

in Council shall *forthwith*, by notification in the *Bombay Gazette*, nominate so many fit and proper persons to be Fellows of the said University, as with the then Fellows of the said University shall make the number of such Fellows, exclusive as aforesaid, twenty-six. But nothing herein contained shall prevent the Governor of Bombay in Council from nominating more than twenty-six persons to be Fellows of the said University, if he shall see fit

The appointment of a Fellow may be cancelled.

VII. The Governor of Bombay in Council may cancel the appointment of any person already appointed or hereafter to be appointed a Fellow of the University; and as soon as such order is notified in the *Gazette*, the person so appointed shall cease to be a Fellow.

Chancellor, Vice-Chancellor, and Fellows, to superintend the affairs of the University.

VIII. The Chancellor, Vice-Chancellor, and Fellows for the time being shall have the entire management of and superintendence over the affairs, concerns, and property of the said University; and in all cases unprovided for by this Act, it shall be lawful for the Chancellor, Vice-Chancellor, and Fellows to act in such manner as shall appear to them best calculated to promote the purposes intended by the said University. The said Chancellor, Vice-Chancellor, and Fellows shall have full power from time to time to make and alter any bye-laws and regulations (so as the same be not repugnant to law, or to the general objects and provisions of this Act) touching the examination for degrees and the granting of the same; and touching the examination for honours, and the granting of marks of honour for a higher proficiency in the different branches of Literature, Science, and Art; and touching the qualifications of the candidates for degrees, and the previous course of instruction to be followed by them and the preliminary examinations to be submitted to by

Bye-laws.

them; and touching the mode and time of convening the meetings of the Chancellor, Vice-Chancellor, and Fellows; and in general touching all other matters whatever regarding the said University. And all such bye-laws and regulations, when reduced into writing, and after the common seal of the said University shall have been affixed thereto, shall be binding upon all persons, members of the said University, and all candidates for degrees to be conferred by the same, provided such bye-laws and regulations shall have been first submitted to and shall have received the approval of the Governor of Bombay in Council.

Meetings of the Senate.

IX All questions which shall come before the Chancellor, Vice-Chancellor, and Fellows, shall be decided at a meeting of the Senate by the majority of the members present; and the Chairman at any such meeting shall have a vote, and, in case of an equality of votes, a second or casting vote. No question shall be decided at any meeting, unless the Chancellor, or Vice-Chancellor and five Fellows, or, in the absence of the Chancellor and Vice-Chancellor, unless six Fellows at the least shall be present at the time of the decision. At every meeting of the Senate, the Chancellor, or in his absence the Vice-Chancellor, shall preside as Chairman; and, in the absence of both, a Chairman shall be chosen by the Fellows present, or the major part of them.

Appointment and removal of Examiners and Officers.

X. The said Chancellor, Vice-Chancellor and Fellows for the time being shall have full power from time to time to appoint, and, as they shall see occasion, to remove all Examiners, Officers, and servants of the said University.

Power to confer degrees.

XI. The said Chancellor, Vice-Chancellor, and Fellows shall have power, after examination, to confer the several degrees of Bachelor of Arts, Master of Arts,

Bachelor of Laws, Licentiate of Medicine, Doctor of Medicine, and Master of Civil Engineering; they shall also have power, after examination, to confer upon the candidates for the said several degrees marks of honour for a high degree of proficiency in the different branches of Literature, Science, and Art, according to rules to be determined by the bye-laws to be from time to time made by them under the power in that behalf given to them by this Act.

Qualification for admission of candidates for degrees.

XII. Except by special order of the Senate, no person shall be admitted as a candidate for the degree of Bachelor of Arts, Master of Arts, Bachelor of Laws, Licentiate of Medicine, Doctor of Medicine, or Master of Civil Engineering, unless he shall present to the said Chancellor, Vice-Chancellor, and Fellows a certificate from one of the Institutions authorized in that behalf by the Governor of Bombay in Council, to the effect that he has completed the course of instruction prescribed by the Chancellor, Vice-Chancellor, and Fellows of the said University, in the bye-laws to be made by them under the power in that behalf given by this Act.

Examination for degrees.

XIII. The said Chancellor, Vice-Chancellor, and Fellows shall cause an examination for degrees to be held at least once in every year; on every such examination the candidates shall be examined either by Examiners appointed for the purpose from among the Fellows, by the said Chancellor, Vice-Chancellor, and Fellows, or by other Examiners so to be appointed; and on every such examination the candidates, whether candidates for an ordinary degree or for a degree with honours, shall be examined on as many subjects and in such manner as the said Chancellor, Vice-Chancellor, and Fellows shall appoint.

Grant of degrees.

XIV. At the conclusion of any examination of the candidates, the Examiners shall declare the name of every candidate

whom they shall have deemed entitled to any of the said degrees, and his proficiency in relation to other candidates; and also the honours which he may have gained in respect of his proficiency in that department of knowledge in which he is about to graduate; and he shall receive from the said Chancellor a certificate, under the seal of the said University of Bombay, and signed by the said Chancellor or Vice-Chancellor, in which the particulars so stated shall be declared.

Fees

XV. The said Chancellor, Vice-Chancellor, and Fellows shall have power to charge such reasonable fees for the degrees to be conferred by them, and upon admission into the said University, and for continuance therein, as they, with the approbation of the Governor of Bombay in Council, shall from time to time see fit to impose. Such fees shall be carried to one General Fee Fund for the payment of expenses of the said University, under the directions and regulations of the Governor of Bombay in Council, to whom the accounts of income and expenditure of the said University shall, once in every year, be submitted for such examination and audit as the said Governor of Bombay in Council may direct.

Annual Accounts.

ACT FOR CONFERRING ADDITIONAL DEGREES

ACT No. XLVII. OF 1860.

AN ACT *for giving to the Universities of Calcutta, Madras, and Bombay, the power of conferring Degrees in addition to those mentioned in Acts II., XXII., and XXVII. of* 1857.

Preamble.

Whereas it is expedient to give to the Universities of Calcutta, Madras, and Bombay, established under Acts II., XXII., and XXVII. of 1857, the power of conferring Degrees other than the Degrees in that Act expressly provided for; it is enacted as follows:—

Power of Universities to confer Degrees.

I. It shall be competent to the Chancellor, Vice-Chancellor, and Fellows of the Universities of Calcutta, Madras, or Bombay, respectively, to confer such Degrees, and to grant such Diplomas or Licences in respect of Degrees, as the said Chancellor, Vice-Chancellor, and Fellows of any such University shall have appointed or shall appoint by any Bye-laws or Regulations made and passed, or to be made or passed by them in the manner provided in the said Acts, and submitted to and approved by the Governor General in Council as far as regards the University of Calcutta, or by the Governor in Council of Madras or Bombay as regards the Universities of Madras and Bombay respectively

Construction.

II All the provisions contained in the said Acts II., XXII., and XXVII. of 1857, with respect to the Degrees therein mentioned, and to the examinations for those Degrees, shall apply to any Degrees which may be conferred under this Act and to the examinations for such Degrees

V.

Bye-laws.

I.—CONSTITUTION OF THE SENATE AND OF THE FACULTIES.

1. The Chancellor, Vice-Chancellor, the Deans of the Faculties of Arts, Law, Medicine and Engineering, the Syndics, and the Fellows of the University, according to sections III, IV, V, and VI of the Act of Incorporation, shall have seniority and precedence, first, in the order above specified down to the Syndics, and, secondly, according to their official precedence in the case of *ex-officio* Fellows, and, thirdly, in the case of other Fellows, according to the sequence of appointments.

2. The Senate may, for gross misbehaviour unfitting a Fellow in its opinion for his office, and after hearing such Fellow or any other Fellow nominated by him on his behalf, request that his appointment be cancelled under the provisions of section VII of the Act of Incorporation.

3. At a convenient time, soon after the appointment of any Fellow, the Syndicate shall, and at any subsequent time the Syndicate may, consider and recommend his appointment to one or more of the Faculties. Such recommendation shall be considered and adopted or rejected at the next following meeting of the Senate.

II.—THE FACULTIES.

4. There shall be four Faculties, namely, of Arts, Law, Medicine, and Civil Engineering. Every member of the Senate shall be a member of one Faculty at least, and any member of the Senate may be a member of more than one Faculty.

5. Each Faculty shall meet ordinarily once a year, within three weeks after the fixed date for the Annual Convocation for Conferring Degrees, for the purpose of electing a Dean and Syndics for the year, and at other times when convened by the Dean, or as provided in Bye law 8.

6. A meeting of any Faculty shall also be convened by the Dean on the requisition of any three of its members. The Dean, or Senior Fellow present, shall be chairman at such Meeting, and the chairman shall have a vote, and, in case of an equality of votes, a casting vote.

7. The office of Dean shall be vacated by the Dean's ceasing to reside in the City of Bombay for a period of more than three calendar months, or by his leaving the Presidency of Bombay without giving notice to the Registrar of his intention to return within three calendar months.

8. On the occurrence of such a vacancy the Vice-Chancellor shall direct the Senior Fellow in Bombay belonging to the Faculty in which the vacancy has occurred to convene a Meeting of the Faculty for the election of a new Dean.

9. Three Members of any Faculty shall constitute a quorum of that Faculty.

III.—THE SYNDICATE.

10. The Executive Government of the University shall be vested in a Syndicate, consisting of the Vice-Chancellor and ten of the Fellows, who shall be elected for one year by the several Faculties in the following proportions:—

Four by the Faculty of Arts, one of whom shall be elected separately to represent the Physical and Experimental Sciences.
Two by the Faculty of Law.
Two " " Medicine.
Two " " Civil Engineering.

11. It will be the duty of the Syndicate, subject to the revision and control of the Senate, to appoint, and, if necessary, to remove the Examiners and all other officers and servants of the University except the Registrar; to fix their salaries and emoluments, save as provided by any Bye-law; to order Examinations in conformity with the Regulations, and declare the results as they bear on Degrees, Honours, and Rewards; to keep the accounts of the University, and to correspond on the business of the University with the Government and all other authorities and persons; to consider proposals laid before it by members of the Senate, and from time to time to frame such Bye-laws and Regulations as may be necessary, subject to the approval of the Senate.

12. The elections of Syndics shall take place within three weeks after the fixed date for the Annual Convocation for Conferring Degrees.

13. The Syndicate shall meet ordinarily once a month, and at other times when convened by the Vice-Chancellor, or, in his absence, by the Senior Fellow in the Syndicate.

14. The office of Syndic shall be vacated by the Syndic's being absent from three consecutive ordinary monthly meetings.

15. On the occurrence of such a vacancy the Vice-Chancellor shall direct a Meeting of the Faculty in which the vacancy has occurred to be convened for the election of a new Syndic.

16. Four members of the Syndicate shall constitute a quorum, and all questions shall be decided by a majority.

17. The Vice-Chancellor, or, in his absence, the Senior Fellow present, shall preside at all Meetings of the Syndicate. The Chairman at such Meetings shall have a vote, and, in case of an equality of votes, a casting vote.

18. Each Faculty shall report on any subject that may be referred to it by the Syndicate.

19. Any Faculty, or any Member of the Senate, may make any recommendation to the Syndicate, and may propose any Bye-law or Regulation for the consideration of the Syndicate.

20. Subject to Bye-law 40, the decision of the Syndicate on any such recommendation or proposal may be brought before the Senate by any member of the Senate by way of Resolution at one of its Meetings, and the Senate may approve, revise, modify or overrule any such decision, or may direct the Syndicate to review it.

21. No proposal shall be entertained by the Senate that has not, in the first instance, been considered by the Syndicate, or submitted for a period of at least three months for consideration by the Syndicate.

IV.—BOARD OF ACCOUNTS.

22. A Board of Accounts, consisting of three Fellows of the University not being members of the Syndicate, shall be appointed annually by the Senate within three weeks

after the fixed date for the Annual Convocation for Conferring Degrees.

23. The Board shall meet ordinarily once every three months, and at other times when convened by the Vice-Chancellor.

24 The Board shall examine and audit the University Accounts; prepare the University Budget, and the account of Endowment and Trust Funds; consider ways and means; and make recommendations, where necessary, to the Syndicate on all matters relating to the finances of the University.

25. Members of the Board shall hold office until the next Annual Election. They shall be eligible for re-appointment at the expiration of their office. All vacancies in the Board occurring between two Annual Elections shall be filled up by persons appointed by the Syndicate.

V.—THE REGISTRAR.

26. The Registrar shall be appointed by the Senate at an Ordinary Annual Meeting. His term of office shall be two years, but the Registrar may be re-appointed.

27. The duties of the Registrar shall be as follows :—

(*a*) To be the custodian of the Records, Library, Common Seal, and such other property of the University as the Syndicate shall commit to his charge.

(*b*) To act as Secretary to the Syndicate and to attend all Meetings of the Senate, Faculties, Syndicate, Board of Accounts and Examiners, and to keep Minutes thereof.

(*c*) To conduct the official correspondence of the Syndicate.

(*d*) To issue all notices convening meetings of the Senate, Faculties, Syndicate and Board of Accounts.

(*e*) To perform such other duties as may be from time to time prescribed by the Syndicate, and generally to render such assistance as may be desired by the Vice-Chancellor in performance of his official duties.

28. The salary of the Registrar shall be Rs. 360 per month.

29. Leave of absence may be granted to the Registrar by the Syndicate for a period not exceeding two months for any one term of office, or six months in all, on such terms as to salary as the Syndicate may think proper. During the absence of the Registrar on leave, an Acting Registrar may be appointed by the Syndicate, who shall be paid at such rate not exceeding the salary of the Registrar as the Syndicate may determine. If the Registrar shall overstay his leave, his appointment shall become vacant.

30. In case of necessity the Vice-Chancellor is empowered to provide for the performance of the duties of the Registrar.

VI.—MEETINGS OF THE SENATE

31. Meetings of the Senate shall be held in the Sir Cowasjee Jehanghier Hall of the University, unless for special reasons the Chancellor or Vice-Chancellor otherwise directs.

32. Such proposals and amendments only as are immediately connected with the University of Bombay, and are in accordance with the Act of Incorporation, shall be entertained and debated in the Senate.

33. The Senate shall meet ordinarily once a year, on the Fourth Saturday in the First Term in Arts, and at other times when convened by the Vice-Chancellor, or, in his absence from the Presidency, by the Syndicate.

34. A meeting of the Senate shall be convened on the requisition of any six of the Fellows to the Vice-Chancellor.

35. A Convocation for Conferring Degrees shall be held on the Third Tuesday in January, and on such other graduation days as may be appointed by the Chancellor or Vice-Chancellor.

36. Persons entitled to Degrees, and desirous of being admitted, must apply in writing ten days previously to the Registrar, who will communicate their names, together with the necessary certificates, to the respective Deans of Faculty, for submission to the Senate on the next graduation day.

37. The Senate will, on the motion of the Deans of Faculty, respectively pass the necessary graces in that behalf, and the Dean of Faculty will then present the persons so approved of to the Chancellor or Vice-Chancellor successively in the following order:—Licentiate of Civil Engineering, Licentiate of Medicine and Surgery, Bachelor of Science,

Bachelor of Arts, Bachelor of Laws, Master of Civil Engineering, Master of Arts, and Doctor of Medicine.

38. Nothing in the foregoing is to be held to prevent the Chancellor admitting to the Degree of M. D. or M. A. any person who may be presented to him by the Senate with a certificate that he has been examined and judged worthy of such special distinction.

39. In special cases and at the discretion of the Syndicate, Candidates who have passed the Examinations may be permitted to take their Degrees *in absentia.*

40. Fourteen days before the day fixed for a Meeting of the Senate the Registrar shall forward to each member of the Senate a statement of all business to be brought before the Meeting and of the terms of all Resolutions to be then proposed, together with the name of the proposer of each, intimation in writing of which has previously reached him. Notice in writing of proposed amendments and the terms thereof and of motions for any change in the order of business as set forth in the statement, must be forwarded so as to reach the Registrar four clear days* before the day of Meeting. The Registrar shall, two clear days before the day of Meeting, forward to each member of the Senate a statement of all the motions and amendments; and no motion or amendment, of which such notice has not been given, shall be put to the Meeting, other than a motion for dissolution, adjournment, or suspension of the sitting, for passing to the next business on the statement, for directing the Syndicate to review their decision, or an amendment which shall be accepted by the Chairman as merely formal.

N. B.—The Chancellor, or in his absence the Vice-Chancellor, or, in the absence of both, a Fellow elected by the Meeting, presides at the Meetings of the Senate. The Senior Fellow present shall take the chair for and until such election only. Six members of the Senate form a quorum, and all questions are decided by a majority of the votes of the members present, the Chairman, in case of an equality of votes, having a second or casting vote (Act XXII. of 1857, section IX).

* "Four clear days" means four days exclusive of the day on which notice reaches the Registrar and of the day of Meeting. Thus, if the Meeting is fixed for Saturday, the notice must reach the Registrar on Monday; if for Friday, the notice must reach him on Saturday.

VII.—ORDER OF BUSINESS.

41. Each Fellow, before he takes his place, shall write his name on a slip of paper which shall be provided for the purpose at the entrance of the place of Meeting, and which he shall then deliver to the door-keeper.

42. At the expiration of half an hour from the time of Meeting, the Chairman shall take notice whether there are six Fellows present; and if there are not, the Meeting shall forthwith be dissolved. Such dissolution shall be recorded by the Registrar under the signature of the Chairman.

43. At every Meeting the business to be entertained shall, unless the Meeting shall by special vote otherwise determine, be taken in the following order:—

(1.) The election, if it is part of the business to be entertained at the Meeting, of the Chairman.

(2.) The election, if it is part of the business to be entertained at the Meeting, of any official of the University.

(3.) Any motion for a change in the order of business.

(4.) Any business and motions of which due notice has been given in the order in which such business and motions are entered in the statement of the business and motions to be brought forward subject to the provisions of this Bye-law and to Bye-law 49.

VIII.—RULES OF DEBATE.

(i.) *Motions.*

44. Every motion shall be affirmative in form, and shall begin with the word *That*.

45. Every motion at a Meeting must be seconded; otherwise it will drop. Any Fellow may second a motion, by saying "That motion is seconded by me," and may reserve his speech.

46. When a motion has been seconded, it shall be stated from the Chair, which shall be done by the Chairman saying "The proposal is," and concluding in the terms of the motion.

47. When the proposal has been thus stated, it may be discussed as a question to be resolved simply in the affirma-

tive or negative, or as proposed to be varied by way of amendment. When, before or after debate, no Fellow rises to speak to the motion, the Chairman shall proceed to put the question to the vote in the manner hereinafter mentioned.

48. Not more than one proposal and one amendment thereto shall be placed before the Meeting at the same time.

49. A substantive proposal once brought forward shall not be proposed a second time at the same Meeting, or at any adjournment thereof. A proposal substantially identical in part with one already brought forward may be brought forward with the omission of such part.

(ii.) *Amendments.*

50. Any proposal before the Meeting may be amended (1) by simply leaving out a word or words; (2) by leaving out a word or words and adding or inserting a word or words; (3) by simply adding or inserting a word or words.

51 No amendment shall be proposed which would reduce a proposal to a negative form, or would alter the first word

52. No amendment shall be proposed which substantially raises a question already disposed of by the Meeting, or is inconsistent with any resolution already passed by it.

53. The order in which amendments to a proposal are to be brought forward shall be determined by the Chairman with reference to their extent and mutual relation subject to Bye-law 43 (3) and (4).

54. An amendment may be moved by any Fellow who has not already spoken in the debate, and must be seconded in the same way as a motion; otherwise it will drop. An amendment, the substance of which has been disposed of in part, may be modified by its proposer so as to retain only the part not so disposed of.

55. When an amendment has been moved and seconded, it shall be stated from the Chair, and then the debate may proceed on the original proposal and the amendment together; but, so far as the question raised by the amendment is one on which he has not yet spoken, any Fellow may speak to that question, though he has spoken to the original question, or a previous amendment

(iii).—*Putting the Question; Further Amendments.*

56. When the debate is concluded, the Chairman shall put question to the vote thus :—

If there is no amendment, the Chairman shall say "The proposal is," and conclude in the terms of the motion.

If there is an amendment he shall say "It has been moved," and state the motion; then he shall say "Since which it has been moved by way of amendment," and state the amendment; and then, if the amendment is one of the first two kinds, he shall put the question "Shall the words (or word) proposed to be left out be retained."

If the amendment is of the second kind, and the last-mentioned question has been resolved in the affirmative, the amendment shall drop. If the last-mentioned question has been negatived, the Chairman shall then put the question "Shall the proposed words be added" [or "inserted"].

If the amendment is of the third kind, the first question put shall be "That those words be there added" [or "inserted"].

57. If an amendment is negatived, the original motion shall be again stated from the Chair, and, subject to the foregoing Bye-laws, any other amendment duly notified shall then be proposed thereto.

58. If an amendment is carried, the proposal as amended shall be stated from the Chair, and may then be debated as a substantive question, to which the further amendments to the original proposal of which due notice has been given and so far as they shall be applicable, may be proposed subject to the foregoing Bye-laws; and such further amendments shall be disposed of in the same manner as the original amendment.

59. No question shall be withdrawn from the decision of the Meeting without its unanimous consent; but this consent shall be presumed if the mover states his wish to withdraw the motion, and the Chairman, after an interval, announces that it is withdrawn.

(iv.) *Adjournments, &c.*

60. A proposal "That this Meeting be now dissolved" or "be now adjourned to (some specified time)" may

be moved at any time as a distinct question, but not as an amendment, nor so as to interrupt a speech. If a motion for dissolution is carried, the business before the Meeting shall drop.

61. A proposal "That the debate be now adjourned" may be moved at the like time and in the like manner as the motion "That this Meeting be now adjourned," and if carried shall have the effect of postponing the debate till the next Meeting. If it be negatived, the debate shall be resumed.

62. No amendment shall be moved to a proposal under either of the two last preceding Bye-laws, except one for substituting a different time for that for which it is proposed to adjourn the Meeting or debate.

63. A Meeting or a debate renewed or continued after an adjournment is to be deemed one with that preceding the adjournment.

64. The motion "That the Meeting pass to the next business on the statement" may be made at any time, in like manner and subject to the same rules as one for adjournment. If such a motion be carried, the proposal under consideration and the amendment thereto shall not be further dealt with at the Meeting.

65. No motion for the dissolution or for the adjournment of the Meeting, or for the adjournment of the debate, or for the suspension of the sitting, or to pass to the next business, shall be made or spoken to during a debate by any Fellow who has spoken in the debate or shall be spoken to by such Fellow. Any such motion shall take the place of any question that may be before the Meeting, and, if not withdrawn, must be disposed of before such question.

66. When a motion of the class contemplated in the last preceding Bye-law has been brought forward and negatived, no other motion of that class shall be again brought forward until after the lapse of what the Chairman shall deem a reasonable time; nor shall a debate be allowed on such second or subsequent motion brought forward during a debate on the same proposal discussed alone, or the same proposal and amendment discussed together, according to Bye-law 43.

(v.) *Miscellaneous.*

67. On each proposal, or proposal and amendment in debate, a Fellow may speak once, subject to the provisions of Bye-laws 54 and 65.

68. The Fellow who is first up, at the conclusion of a speech, has the right to be heard. In cases of competition the Chairman shall decide.

69. The mover of every original Resolution may reply upon the whole debate. But the mover of an amendment or of a dissolution or adjournment, or of the suspension of the sitting, or that the Meeting pass to the next business on the statement, has no right to reply.

70. No Fellow shall speak to the question after the mover has entered on his reply.

71. The Chairman has the same right of moving or seconding a motion or amendment and of addressing the Meeting as any other Fellow. But he shall vacate the chair whilst he is addressing the Meeting, and the chair shall during such time be taken by the Senior Fellow present not being the Chairman.

72. Any Fellow may call the Chairman's attention to a point of order even whilst another Fellow is addressing the Meeting, but no speech shall be made on such point of order. Such a call pronounced by the Chairman to be vexatious, and any interruption or obstruction to the progress of the business before the Senate so pronounced to be unseemly or unreasonable, shall be deemed a breach of order

73. The Chairman shall be the sole judge on any point of order, and may call any Fellow to order, and, if the Fellow so called to order shall in speaking disregard such call, the Chairman may direct him to sit down and thereon another Fellow may speak. In the event of any contumacious disregard of a ruling or call to order by the Chairman, he may request the Fellow so offending to leave the Meeting, and on such requisition the Fellow named by the Chairman shall be suspended from his functions as a Fellow during the Meeting, and shall be bound immediately to withdraw.

74. Any motion standing in the name of a Member who is absent from a Meeting may be brought forward by any other Member.

(vi.) *Voting.*

75. On putting any question to the vote, the Chairman shall call for an indication of the opinion of the Senate by a show of hands in the affirmative and negative, or by sitting and rising, and shall declare the result thereof according to his opinion.

76. Any Fellow may then demand a Division, except on a motion of the kind contemplated in Bye-laws 60 and 61.

77. The Chairman shall thereupon appoint four Tellers, two on each side; and shall give such directions for effecting the Division as he shall consider expedient.

78. Upon the Chairman announcing the Division to be begun, every Fellow who was present at the putting of the question and desires to vote, shall signify his vote by giving to the Tellers for the side of the question upon which he intends to vote, a paper stating his name.

79. Upon the Chairman announcing the Division to be closed, the Tellers shall state in writing the numbers on each side, sign the statement, and hand it to the Chairman, together with the papers (in two separate bundles) containing the names of the several voters on each side, whereupon the Chairman shall declare the result of the Division to the Meeting, and the Division Lists shall be recorded in the Minutes.

80. If, after a Division has been taken, five Fellows present shall in writing demand a scrutiny, the Chairman shall appoint two or more Fellows to act with the Tellers as Scrutineers; and such Scrutineers shall thereupon withdraw and compare the numbers with the names and such names with the list of the Senate for the time being, and shall report the facts found by them to the Chairman, who shall thereupon declare the result to the Meeting, and such declaration shall be conclusive.

81. Pending the scrutiny, the Chairman may, in his discretion, either suspend the sitting or call for such business as may, in his opinion, be most conveniently proceeded with. Business thus entered on, shall be proceeded with; but on its disposal the regular order of subjects, if it have been departed from, shall be resumed.

IX.—ELECTIONS.

82. Elections by the Senate shall be conducted according to the rules hereinbefore provided, subject to the modification prescribed by the Bye-laws next following.

83. No Candidate shall be put in nomination at any Meeting of the Senate for a seat on the Board of Accounts or as Registrar or at any Meeting of a Faculty for the office of Dean of such a Faculty, or Syndic, unless a proposition for his nomination in writing, signed by the intending proposer and seconder, shall have been handed in to the University office at least four clear days previously. And the University Registrar shall, two clear days before the Meeting, forward to every Member of the Senate or Faculty, as the case may be, a list of the proposed nominations.

84. In all cases of contested election, the election shall be by ballot by means of voting papers. In case of a contested election amongst more than two candidates for a single appointment, the candidate who has the smallest number of votes on a first ballot shall be withdrawn, and another ballot between the remaining candidates shall then be taken; and so on until the number of candidates is reduced to two, when the final ballot between these two shall be taken. In case of a contested election for more than one appointment, each Fellow shall be entitled to give as many votes as there are appointments to be filled, but shall not give more than one vote for one person.

ENDOWMENTS.

85. A Statement of all endowments and Trust Funds held by the University shall be published annually in the University Calendar.

UNIVERSITY TERMS.

86. The University year for the Faculties of Arts, Civil Engineering, and Medicine shall be divided into two terms. In the Faculties of Arts and Civil Engineering the First Term shall commence on the Third Monday in November, and shall end on the Third Monday in April. In the Faculty of Medicine the First Term shall commence on the First of November and shall end on the Thirtieth of April. In the Faculties of Arts and Civil Engineering the Second

Term shall commence on the Second Monday in June and shall end on the Third Monday in September. In the Faculty of Medicine, the Second Term shall commence on the Fifteenth of June and end on the Fifteenth of September.

87. Terms can be kept only by matriculated students who shall attend for a prescribed number of days at one or more of the Colleges or Institutions recognized by the University.

88. The following shall be the number of days' attendance necessary for keeping terms:—For the First Term eighty days; for the Second Term in the Faculties of Arts and Civil Engineering, sixty days; and for the Second Term in that of Medicine, seventy days. But if an Undergraduate shall, after his matriculation, attend sixty days during that same term in which he has matriculated, he shall be held to have kept that term.

89. The Principals and Heads of Colleges and Institutions will be requested to register the daily attendance of matriculated students, with a view to being able to certify their having kept terms.

90. Days during which Undergraduates or Graduates are engaged in University Examinations may count towards the keeping of their terms.

91. To keep a term at a College or Recognized Institution, an Undergraduate must go through the full course of study at that College or Institution prescribed for such term to the class to which such Undergraduate then belongs.

VI.

Regulations.

I. ARTS.

MATRICULATION.

1. The Examination will be held once a year at Bombay and at such other places as shall, from time to time, be appointed by the Syndicate,* commencing on the Third Monday in November.

2. Candidates must forward an application to the Registrar two months before the Examination. (*Vide* Form A.)

3. Two months before the commencement of the Examination, each Candidate must pay or cause to be paid to the Registrar at Bombay, or to such person as he may appoint in the Mofussil, a fee of Rs. 10, for which a receipt will be given. (*Vide* Form B.)

4. Failure to pass the Examination will not disqualify the Candidate for again presenting himself at any subsequent Matriculation Examination on a new application being forwarded, and a fresh fee paid.

5. Candidates will be examined in Languages, Mathematics, and General Knowledge.

I.—LANGUAGES.—Two papers.

1. English.
2. One of the following:—

Sanskrit.	French.	Hindustani.
Greek.	Portuguese.	Persian.
Latin. †	Marathi.	Sindhi.
Hebrew.	Gujarathi.	
Arabic.	Canarese.	

* The following places have been appointed by the Syndicate :—

Poona, Belgaum, Ahmedabad, and *Karachi.*

† The attention of students intending to study Medicine is drawn to the fact that the Examining Bodies of the United Kingdom which recognize the Matriculation Examination of the University of Bombay, require a certificate that the Candidate passed in Latin.

(Any other language may at any time be added to this list by the Syndicate.)

In English there will be one paper containing (1) one or more passages for paraphrase, with, as an alternative, one or more passages in the Candidate's vernacular for translation into English, (2) questions in grammar, and (3) an exercise or exercises in composition.

In the second Language there will be one paper containing prose passages for translation from and into English, and questions in grammar.

The Candidate will be called upon to read and to explain *extempore* a prose passage from a standard author to be selected by the Examiners.

N.B.—It is essential that the Candidate should not know beforehand from what books he will have to read.

II.—MATHEMATICS.—Two papers.

1*st.*—Arithmetic. The examples to be worked from first principles, and not merely by rules. Algebra to Simple Equations inclusive. Problems will be set involving Simple Equations.

2*nd.*—First four books of Euclid, with deductions.

III.—GENERAL KNOWLEDGE.—Two papers.

1*st.*—Elementary History of England and India, and Elementary Geography.

2*nd.*—Elementary knowledge of—

(*a.*)—The mechanical powers.

(*b.*)—The laws of chemical combination, the chemistry of air and water, and the phenomena of combustion.

(*c.*)—The solar system.

N.B.—Candidates must satisfy the Examiners in each branch of the Examination.

6. The Examination will be conducted by means of printed questions to be answered in English, except when otherwise specified. The Candidates will also be examined *vivâ voce* in English.

7. On the Fourth Monday after the commencement of the Examination, the Examiners will publish a list of successful Candidates in the order of merit, with the total number of marks obtained by each Candidate, and the name of his school.

8. A Certificate will be given to those who pass the Examination. (*Vide* Form C.)

BACHELOR OF ARTS.

9. Candidates for the Degree of Bachelor of Arts must have passed the Matriculation Examination, and will be required to pass three subsequent examinations, the first to be called the Previous Examination, the second the First Examination for the Degree of Bachelor of Arts, and the third the Second Examination for the Degree of Bachelor of Arts.

THE PREVIOUS EXAMINATION.

10. The Previous Examination will be held once a year in Bombay, commencing on the First Monday in November.

11. No Undergraduate will be admitted to this Examination unless he shall have kept two terms at a College or Institution recognized in Arts, and unless he produce satisfactory testimonials under Form D.

Any Undergraduate of a University recognized by the University of Bombay may be admitted to this Examination, provided his testimonials of good conduct and length of study from his own University be satisfactory.

12. Candidates must forward an application to the Registrar at least two months before the Examination. (*Vide* Form D.)

13. Each Candidate must pay to the Registrar a fee of Rs. 20, for which a receipt will be given. (*Vide* Form E.)

14. Candidates will be examined in the following subjects :—

I. Languages.
II. Mathematics.
III. Logic.
IV. History.
V. Natural Science.

I.—LANGUAGES—Two papers.

1. English.
2. One of the following :—

Sanskrit.	Latin.	Arabic.
Greek.	Hebrew.	Persian.

Candidates will be examined in books to be prescribed by the Syndicate one year before the Examination.

In each language there will be one paper and a *vivâ voce* Examination. The paper in English will contain passages to be paraphrased. The paper in the second language will contain passages for translation both out of that language into English and *vice versâ*. The paper on each language will contain questions in grammar, as well as in the matter of the books taken up by the Candidates.

II.—MATHEMATICS—Two papers.

1. Algebra to Quadratic Equations, inclusive, with Proportion and Variation, Permutations and Combinations, the Progressions, and the Binomial Theorem.
2. Euclid, Books I—IV and VI, with deductions, and Definitions of Book V.

III.—LOGIC—One paper.

Logic.—The subjects treated of in Fowler's Deductive Logic. The Examination will comprise easy questions in Logical Analysis.

IV.—HISTORY—One paper

Ancient History.

A definite period will be notified by the Syndicate one year before the Examination.

V.—NATURAL SCIENCE.—One paper.

Elementary Physics (except Light and Electricity), viz., Laws of Motion—Forces of Nature considered generally—Energy considered generally—Visible Energy—Heat.

Text book recommended in Elementary Physics ; *Balfour Stewart* : Lessons in Elementary Physics.

15. The Examination will be conducted by means of printed questions to be answered in English, except when otherwise specified. The Candidates will also be examined *vivâ voce* in languages.

16. On the Third Monday in November the Examiners will publish a list of successful Candidates in two Classes and Pass, the names in each Class and Pass being arranged in alphabetical order

FIRST EXAMINATION FOR THE DEGREE OF BACHELOR OF ARTS.

17. The First Examination for the Degree of Bachelor of Arts will be held annually at Bombay, commencing on the First Monday in November.

18. No Undergraduate will be admitted to this Examination unless he shall have kept four terms in the University of Bombay, and unless he produce satisfactory testimonials under Form F

N B.—An Undergraduate of a University recognized by the University of Bombay, who has passed at his own University an Examination in Arts corresponding, in the judgment of the Syndicate, to the Previous Examination at this University, may be admitted to this Examination, provided that he has studied in residence for such time at a recognized University or at this University, or partly at one and partly at the other, as may be considered by the Syndicate equivalent, in the circumstances of each case, to the terms required for the aforesaid Examinations.

19 Candidates must forward an application to the Registrar at least two months before the Examination. (*Vide* Form F.)

20. Each Candidate must pay to the Registrar a fee of Rs. 20, for which a receipt will be given. (*Vide* Form G.)

21 Failure to pass the Examination will not disqualify the Candidate for presenting himself on a subsequent occasion on a new application being forwarded and a fresh fee paid.

22 Candidates will be examined in the following subjects —

I Languages

II Mathematics.

I —LANGUAGES—Four papers.

1. English

2 One of the following .—

Sanskrit.	Latin	Arabic
Greek.	Hebrew.	Persian

Candidates will be examined in books to be prescribed by the Syndicate one year before the Examination

In each language there will be two papers and a *vivâ voce* Examination The papers on English will contain passages to be paraphrased. The papers on the second language will contain passages for translation both out of that language into English and *vice versâ*. The papers on each language will contain questions in grammar, as well as in the matter of the books taken up by the Candidates

II —MATHEMATICS—Two papers

1. Trigonometry.—Solution of Plane Triangles with expressions for the Area The nature and use of Logarithms

2 Statics —Composition and Resolution of Forces, Centre of Gravity, and the Mechanical Powers

23. The Examination will be conducted by means of printed questions to be answered in English, except when otherwise specified The Candidates will also be examined *vivâ voce* in Languages

24 On the Third Monday in November the Examiners will publish a list of successful Candidates in two Classes and Pass, the names in each Class and Pass being arranged in alphabetical order

25. A Certificate will be given to those who pass the Examination (*Vide* Form H)

SECOND EXAMINATION FOR THE DEGREE OF BACHELOR OF ARTS.

26. The Second Examination for the Degree of Bachelor of Arts will be held annually at Bombay, commencing on the Second Monday in November.

27. No Undergraduate will be admitted to this Examination unless he shall have kept six terms in the University of Bombay, or has been admitted to the First Examination for the Degree of B.A. under the *N.B.* to Regulation 18, and has thereafter kept two terms in the University of Bombay, and unless he produce satisfactory testimonials under Form I.

28. Candidates must forward an application to the Registrar at least two months before the Examination (*vide* Form I).

29. Each Candidate must pay to the Registrar a fee of Rs. 10, for which a receipt will be given (*vide* Form J).

30. Failure to pass the Examination will not disqualify the Candidate for presenting himself on a subsequent occasion, on a new application being forwarded and a fresh fee paid.

31. Candidates will be examined in the following subjects:—

I. Languages.

II. One of the following groups to be selected by the Candidate:—

A. Language and Literature.
B. History and Political Economy.
C. Logic and Moral Philosophy.
D. Mathematics.
E. Natural Science.

I.—LANGUAGES—Two papers.

1. English.

2. One of the following:—

Sanskrit.	Latin.	Arabic.
Greek.	Hebrew.	Persian.

Candidates will be examined in books in each language to be prescribed by the Syndicate two years before the Examination.

In each language there will be one paper. The paper on the second language will contain passages for translation both out of that language into English and *vice versâ*. The paper on each language will contain questions in grammar, as well as in the matter of the books taken up by the Candidates.

II.—GROUPS—Four papers.

A.—LANGUAGE AND LITERATURE.

(*a.*) *English*—Two papers on books to be prescribed from time to time by the Syndicate.

(*b.*) *Second Language*—Two papers on books to be prescribed from time to time by the Syndicate.

B.—HISTORY AND POLITICAL ECONOMY.

(*a.*) *Political Economy*—One paper; *Smith*: Wealth of Nations; *Fawcett*: Manual of Political Economy.

(*b.*) *History of India* in the 16th, 17th, and 18th Centuries down to the overthrow of the Peshwa. One paper: *Elphinstone*: History of India; *Mill*: History of British India.

(*c.*)—One of the following:—

(1.) *History of Rome*, from the earliest times to the close of the Republic. Two papers: one on the Political History, and one on the History of Institutions, Literature, and Religion.

(2.) *History of Greece*, from the Persian invasion to the taking of Corinth. Two papers, as above.

(3.) *History of England*, from the Restoration to the passing of the Reform Bill in 1832. Two papers: one on the Political History, and one on the History of Institutions, Literature, and Science.

C.—LOGIC AND MORAL PHILOSOPHY.

(*a.*) *Logic*—Two papers: *Fowler*: Deductive and Inductive Logic; *Mill*: Books I, II, and III.

(*b.*) *Moral Philosophy.*—Two papers: *Sidgwick*: Method of Ethics; *Butler*: First part of the Analogy, and Sermons.

D.—Mathematics.

(a) *Pure Mathematics.*

(a.) *Conic Sections treated Geometrically and Analytically, not including abridged notation.* One paper.

(b.) *Differential Calculus:* One paper—Differentiation of Functions of one variable; Successive Differentiation; Taylor's Theorem; Evaluation of Indeterminate Functions; Maxima and Minima of Functions of one variable. *Integral Calculus.*—Integration of Functions of one variable.

(b) *Applied Mathematics.*

[The student may select either (1) and (2), or (3) and (4).]

(1)—*Dynamics:* One paper: Laws of motion; Uniform and uniformly accelerated motion; Falling Bodies; Projectiles; Collision; the Pendulum.

(2)—*Hydrostatics:* One paper: Pressure of non-elastic and elastic Fluids; Specific gravity; Floating Bodies; Rotating Liquid; Tension of vessels containing Fluids; Construction and use of the more simple Instruments and Machines.

(3)—*Optics:* One paper: Reflection and Refraction of Rays at Plane and Spherical Surfaces, not including Aberrations; Refraction through Prisms, Plates and Lenses; the Eye; Telescopes.

(4)—*Astronomy:* One paper: The more elementary parts so far as they are necessary for the explanation of the more simple phenomena without calculation.

E.—Natural Science.

[The student may select either (1) and (2), or (3) and (4).]

(1)—*Elementary Physics:* Two papers: Laws of motion; Forces of Nature considered generally; Energy considered generally; Visible energy; Heat, Light and Electricity; Oral examination on the use of apparatus.

(2)—*Inorganic Chemistry:* Two papers: The Chemistry of the non-metallic elements and their more important compounds; the Chemistry of the principal metallic elements and their more important compounds; general principles of Chemical Philosophy; the practical recognition of simple Salts.

(3)—*Vegetable Anatomy and Physiology, and Systematic Botany:* Two papers: *Flowering Plants*; their Parts; the Leaf; Stem; Buds and branches; the various forms and the duration of Plants; the Root and underground stem; Inflorescence; the Flower; Calyx; Corolla; Stamens and Pistil, Structure of the Ovule; the Fruit and Seed; Fertilization; Germination; Cells and their contents; Chemical constituents of Plants; the structure and vital processes of the Stem, Root, and Leaf; Surface covering and appendages of Plants; Food of Plants; Principles of Classification; a general knowledge of the characters, distribution, properties and uses of the following natural order:—*Anonaceæ, Cruciferæ, Malvaceæ Ampelideæ, Leguminosæ, Myrtaceæ, Cucurbitaceæ, Umbelliferæ, Rubiaceæ, Compositæ, Apocyneæ, Convolvulaceæ, Labiatæ, Urticeæ, Euphorbiaceæ, Scitamineæ, Orchideæ, Amaryllideæ, Palmæ, Aroideæ and Gramineæ.*

A general knowledge of the two Cryptogamic orders *Filices* and *Fungi.*

Practical Examination.—Description and recognition of species and of microscopic preparations. The collection and drying of Botanical Specimens.

(4)—*Comparative Anatomy and Physiology*: Two papers: Structure of a Mammalian animal, with the minute structure and chemical constituents of the more important tissues; its elementary Physiology; the Blood; Vascular System and Circulation; Respiration; Digestion; the sources of loss and gain to the Blood; Motion and Locomotion; Voice and Speech; Nervous System; Innervation; Sensation; Organs of sight, sound, smell, taste and touch; Reproduction; Life and Death; Elementary Anatomy and Physiology of a Bird, Lizard, Frog, Fish, Oyster, Insect, Lobster, Earthworm, Starfish, Jellyfish, and Sponge; Principles of Zoological Classification; Distribution of Species; Animal Embryology; Recognition and Description of Preparations.

32. The Examination will be conducted by means of printed questions to be answered in English, except when otherwise specified. The Candidates will also be examined *vivâ voce* in Languages.

33. On the Fourth Thursday in November, the Examiners will publish a list of successful Candidates in two Classes and Pass, the names in each Class and Pass being arranged in alphabetical order.

34. A Certificate will be given to those who pass the Examination (*vide* Form K).

BACHELOR OF SCIENCE.

35. Candidates for the Degree of Bachelor of Science must have passed the Previous Examination, and will be required to pass two subsequent Examinations, the one to be called the First Examination for the Degree of Bachelor of Science, and the other the Second Examination for the Degree of Bachelor of Science.

N.B. (1)—Masters of Arts who shall have taken that Degree prior to the end of 1881, and who in the Examination for B.A. have passed in Group C., D. or E., or the subjects in the opinion of the Syndicate equivalent thereto when the examination was passed, and who in the examination for the Degree of M.A. have passed in Branch 3 or 4 of that Examination, may obtain the Degree of B.Sc. on passing an examination in such of the subjects prescribed for that Degree as in the opinion of the Syndicate shall be properly complementary to those in which the Candidates have already passed, regard being had to the rules prescribed for the Final Examination for the Degree of B.Sc. But Candidates passing under this provision shall not be classed or be eligible for prizes.

N.B. (2)—A Bachelor of Arts who has taken up Group C., D., or E. in the B.A. Examination may obtain the Degree of Bachelor of Science on passing the final examination only for that Degree.

I.—FIRST EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE.

36. The First Examination for the Degree of Bachelor of Science will be held annually at Bombay, commencing on the First Monday in November.

37. No Undergraduate will be admitted to this Examination, unless he shall have kept four terms in the University of Bombay, and unless he produce satisfactory testimonials under Form L.

N.B.—An Undergraduate of a University recognized by the University of Bombay, who has passed at his own University an examination in Arts corresponding, in the judgment of the Syndicate, to the Previous Examination at this University, may be admitted to this Examination, provided that he has studied in residence for such time at a recognized University or at this University or partly at one and partly at the other as may be considered by the Syndicate equivalent, in the circumstances of each case, to the terms required for the aforesaid examinations.

38. Candidates must forward an application to the Registrar at least two months before the Examination (*vide* Form L).

39. Each Candidate must pay to the Registrar a fee of Rs. 20, for which a receipt will be given (*vide* Form M).

40. Failure to pass the Examination will not disqualify the Candidate for presenting himself on a subsequent occasion, on a new application being forwarded and a fresh fee paid.

41. Candidates will be examined in the following subjects :—

1. MATHEMATICS—TWO PAPERS.

Trigonometry.—Solution of Plane Triangles with expressions for the Area. The nature and use of Logarithms.

Statics—Composition and Resolution of Forces Centre of Gravity. The Mechanical Powers.

2. INORGANIC CHEMISTRY—TWO PAPERS AND A PRACTICAL EXAMINATION.

Differences between Mechanical Mixture, Solution, and Chemical Combination. Outlines of Crystallography. Formation of Crystals. Dimorphism. Isomorphism. Conditions on which the Melting-point and the Boiling-point of a substance depend Difference between Elementary and Compound Substances. Laws of Chemical Combination. Equivalent Weights of the Elements. Multiple Proportions. The Atomic Theory. Atomic Value (Quantivalence). Molecules. Molecular Weights. Relation between the Density of a Gas and its Molecular Weight. Abnormal Densities. Avogadro's hypothesis. Combination of Gases by Volume. Compound Radicals. Atomic and Molecular combination.

Meaning of Chemical symbols, formulæ, and equations. Calculation of quantities by weight and by volume. Chemical changes, and the conditions under which they occur. Combination. Decomposition. Double-decomposition. Nature of Acids, Bases, and Salts. Capacity of Saturation of Acids and Bases. Nomenclature.

Relation between Atomic Weight and Specific Heat. Faraday's Electrolytic Law. Principles of Spectrum-Analysis. Diffusion of Gases.

Hydrogen, Chlorine, Bromine, Iodine, Fluorine. The combinations of the last four elements with Hydrogen.

Oxygen. Ozone. Water and Peroxide of Hydrogen. The oxides and oxyacids of Chlorine. Chlorates and Hypochlorates.

Sulphur. Sulphuretted Hydrogen. The oxides of Sulphur. Sulphuric Acid and the Sulphates. Sulphurous Acid and the Sulphites. Chlorosulphuric Acid.

Nitrogen. The Atmosphere, and its relations to animal and vegetable Life. Ammonia. Ammonium and its Salts. The oxides of Nitrogen. Nitric Acid and Nitrates. Nitrous Acid and Nitrites.

Phosphorus. Phosphoretted Hydrogen. The oxides of Phosphorus. Phosphoric Acid and the Phosphates. Chloride and Oxychloride of Phosphorus.

Arsenic and its oxides. Arseniuretted Hydrogen. Arsenious Acid and its Salts. Arsenic. Acid and its Salts. The Sulphides of Arsenic. Detection of Arsenic.

Antimony, its oxides and sulphides. Antimoniuretted Hydrogen. Chlorides of Antimony. Compounds of Antimonic Oxide. Detection of Antimony.

Boron. Boracic acid and the Borates.

Carbon. Carbonic oxide and Carbonic acid. The Carbonates. Carbon Oxysulphide. Sulphocarbonic Acid. Marsh-gas. Ethylene. Combustion. Structure of Flame. Coal-gas. Davy Lamp. Principles of Illumination.

Silicon. Siliciuretted Hydrogen. Silicon Chloride. Silicon Chloroform. Silica and the Silicates.

Potassium. Sodium. Silver.

Calcium. Strontium. Barium.

Aluminium.
Magnesium. Zinc. Cadmium.
Lead.
Manganese. Iron. Cobalt. Nickel. Chromium.
Bismuth. Copper. Mercury. Gold. Tin.
Platinum.
The chief Compounds of these Metals with the more important Acid radicals. The detection of these Metals, and their Compounds, in powder, or in solution.

3. EXPERIMENTAL PHYSICS—TWO PAPERS.

[*Candidates will be expected to show a general acquaintance with the Methods and Apparatus by which the leading principles of Physics, as enumerated below, can be illustrated and applied.*]

Units of Measurement.
The Laws of Motion considered experimentally.
The chief Forces of Nature.
The general properties of Solids, Liquids, and Gases.
The nature, intensity, and transmission of Fluid Pressure in general.
The Pressure of Liquids in Equilibrium under the action of Gravity.
The Equilibrium of Solids floating or entirely immersed in gravitating Fluids. The Specific Gravities of substances, with the ordinary modes of determining them.
Measurement of the Pressure of the Atmosphere and of the Elastic Force of Gases.
Diffusion of Liquids and Gases.
Definition of Work and Energy; Conservation and Transmutation of Energy.

ACOUSTICS.

Production and mode of Propagation of Sound.
Intensity, Pitch, and Quality.
Velocity of Sound in Air.
Influence of Temperature and Density.
Velocity of Sound in other Media.
Laws of Reflection and Refraction.
Nature of Musical Sounds.
Longitudinal Vibrations of Rods and of Columns of Air.
Transverse Vibrations of Strings. Variation in their Rate of Vibration by changes in their tension, length, thickness, and substance.

HEAT.

Definitions of *Heat* and *Temperature*.

Construction of Instruments for the Measurement of Temperature.

Expansion of Solids, Liquids, and Gases under Heat.

Change of State; Tension of Vapours; Latent Heat.

Radiant Heat, its reflection, refraction and absorption.

Conduction; definition of Thermal Conductivity.

Convection.

Specific Heat. Mechanical Equivalent of Heat.

MAGNETISM.

Properties of Magnets. Induction. Magnetic relations of Iron and Steel.

Terrestrial Magnetism

ELECTRICITY.

Two Electrical States and their mutual relations.

Conduction and Insulation.

Induction.

Electric Attraction and Repulsion.

Distribution and Accumulation of Electricity on Conductors.

Electric Discharge.

Voltaic Electricity; the various Batteries.

Electromotive Force, Strength of currents, Resistance; Ohm's Law.

Heating and Chemical effects of Electric Currents.

Action between Currents and Magnets; Electro-Magnetism.

Induced Currents; Magneto-Electricity.

Thermo-Electricity.

OPTICS.

Laws of Propagation of Light. Measurement of Velocity of Light. Photometry.

Laws of Reflection and Refraction of Light.

Reflection at Plane and at Spherical Surfaces.

Refraction at Plane and at Spherical Surfaces.

Refraction through Lenses, including the formation of Images.

Chromatic Dispersion.

4 GENERAL BIOLOGY—TWO PAPERS AND A PRACTICAL EXAMINATION.

Structure, functions, and life-history of simple Unicellular Plants, such as *Protococcus* and *Saccharomyces* (Yeast) as types of Vegetable life.

Structure, functions, and life-history of *Penicillium*, *Mucor*, or some other simple Fungus.

Structure, functions, and life-history of *Chara* or *Nitella*

Morphology, histology, and history of the reproduction of a Fern.

Morphology and histology of a Flowering plant; structure of a flower; homologies of leaves and floral organs; histology of ordinary vegetable tissues, such as epidermis, parenchyma, fibrovascular tissue, and their arrangement in the stem and leaves.

Growth of a Flowering plant; formation of wood and bark; nature of cambium.

Reproduction of a Flowering plant; structure of ovule; methods of fertilization; development of ovule into seed.

General principles of Vegetable Nutrition; food of plants; action of green parts of plants; nature and flow of sap.

Structure, functions, and life-history of the following Animals, as types of some of the chief divisions of the Animal Kingdom:—*Amœba*, *Vorticella*, *Hydra*, Earthworm, Mussel, Snail, Lobster or Crayfish, Frog.

General histology of chief animal tissues:—blood; pavement, columnar, ciliated, and glandular epithelium; connective tissue; cartilage; bone; muscle; nerve-fibres and nerve-cells.

General physiology of Circulation, Respiration and Digestion in the Frog, together with the fundamental properties of muscle, nerve, and the spinal cord.

Reproduction of Frog, and chief phases in life of Tadpole.

42. On the Third Monday in November the Examiners will publish a list of successful Candidates in two Classes and Pass, the names in each Class and Pass being arranged in alphabetical order

43. A certificate will be given to those who pass the Examination.

II.—SECOND EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE.

44. The Second Examination for the Degree of Bachelor of Science will be held annually at Bombay, commencing on the Second Monday in November.

45. No Undergraduate will be admitted to this Examination, unless he shall have kept six terms in the University of Bombay, or has been admitted to the First Examination for the Degree of B. Sc. under the *N. B.* to Regulation 37, and has thereafter kept two terms in the University of Bombay, and unless he produce satisfactory testimonials under Form O.

46. Candidates must forward an application to the Registrar at least two months before the Examination (*vide* Form O).

47. Each Candidate must pay to the Registrar a fee of Rs. 10, for which a receipt will be given (*vide* Form P).

48. Failure to pass the Examination will not disqualify the Candidate for presenting himself on a subsequent occasion, on a new application being forwarded and a fresh fee paid.

49. Candidates will be examined in three of the following nine subjects, one at least of which must be chosen from among Nos. III—VIII:—

I. PURE MATHEMATICS—THREE PAPERS.

(1)—*Algebra:* Binomial and Multinomial Theorems. Scales of Notation. Exponential and Logarithmic Series. Convergency and Divergency of Series. Inequalities.

Plane Trigonometry.—Properties of Triangles. Associated Circles of a Triangle. Summation of Series which do not involve exponential functions.

Spherical Trigonometry.—As far as Solution of Triangles.

(2)—*Conic Sections:* Treated Geometrically and Analytically, not including abriged notation.

(3)—*Differential Calculus:* Differentiation of Functions of one variable. Successive Differentiation. Taylor's Theorem. Evaluation of indeterminate Functions. Maxima and Minima of Functions of one variable. Tangents and Normals of Plane Curves.

Integral Calculus: Integration of Functions of one variable. Rectification and Quadrature of Plane Curves.

II. APPLIED MATHEMATICS—Three Papers.

(1)—*Analytical Statics.*—Composition and Resolution of Forces. Centre of Gravity. The Mechanical Powers. *Elementary Hydrostatics.*

(2)—*Elementary Dynamics.*

Dynamics of a Particle.—Rectilinear, Parabolic and Elliptic Motion. Central Forces.

(3)—*Elementary Geometrical Optics.*

Astronomy.—The more elementary parts, so far as they are necessary for the explanation of the more simple phenomena without calculation.

III. EXPERIMENTAL PHYSICS—Three Papers.

The subjects prescribed for the First B Sc. Examination with the addition of the following; the whole being treated Mathematically, as well as Experimentally, so far as the Mathematics of the First B. Sc. Examination are applicable :—

Friction.
Elasticity of Solids, Liquids, and Gases; methods of measurement.
Capillarity.
Connexion between Energy and Velocity. The various Energies and their Transmutations.
Conservation and Dissipation of Energy.

Acoustics.

Indirect methods of measuring Velocity of Sound.
Transverse Vibrations of Rods.
Tuning-forks.
Vibrations of Plates and Membranes.
Musical Intervals.
Composition of Vibrations. Beats.
Interference.
Resonance.

Harmonics.
Quality of Musical Sounds.
Methods of analysing Complex Sounds.

HEAT.

Methods of measuring Specific Heat, Coefficients of Expansion, Tension of Vapours, and Latent Heat; with the chief results that have been obtained.
Relation between Emission and Absorption of Radiant Heat. Theory of Exchanges. Laws of Cooling. Variation with Temperature of Quality and Quantity of Radiation.
Measurement of Coefficients of Conductivity and their variation with Temperature.
Laws of Thermodynamics and their principal Applications.

OPTICS.

Optical description of the Eye, and Theory of unaided Vision.
Vision through Lenses, Microscopes, and Telescopes.
Spectrum-Analysis.
Conditions of Achromatism in thin Compound Prisms and Lenses.
The Wave-Theory; its explanation of Reflexion and Refraction.
Interference, Double Refraction, and Polarization.
Nicol's Prism.
Interference of Polarized Light; Rotatory Polarization.

MAGNETISM.

Magnetic Moments, and methods of comparing them.
The methods of determining the Dip, Total Intensity and Magnetic Declination, at any place.
Secular and Diurnal Variations.
Disturbances and their Laws.
Connexion between Magnetic Disturbances and other phenomena.
Diamagnetism.

ELECTRICITY.

Measurement of Electrical Density, Capacity, Quantity, and Potential.
Centimetre-gramme-second system of Units.

Theory of Voltaic Battery.
Measurement of Electromotive Force, Current, and Resistance.
Action of Currents on Currents.

IV. CHEMISTRY—TWO PAPERS AND A PRACTICAL EXAMINATION.

INORGANIC CHEMISTRY, treated more fully than at the FIRST B.SC. EXAMINATION.

ORGANIC CHEMISTRY.

Detection and estimation of Carbon, Hydrogen, Nitrogen, and Sulphur in Organic Compounds. Calculation of empirical formulæ from percentage composition. Determination of molecular weight of organic bodies. Compound Radicals. Mode in which the atoms are supposed to be united in the molecule. Types. The Valency of Compound Radicals in Relation to the Valency of the Constituent Atoms. Saturated and Nonsaturated Compounds.

Isomerism. Metamerism. Polymerism. Homologous series. Classification of the Carbon Compounds.

The general action of Chlorine, Nitric acid, Sulphuric acid, Chromic acid, Nascent Hydrogen, Potash, and the Chlorides of Phosphorus, on the principal groups of Carbon Compounds.

Fermentation. Decay.

Synthesis of the following:—Urea. Ethyl Alcohol. Tartaric acid. Alizarine.

Derivatives of the series $C_n H_{n+2}$.

Marsh-gas. Ethyl hydride. A special knowledge of Methyl and Ethyl Alcohols and their chief derivatives, particularly Ethers, Acetic Aldehyde, Formic and Acetic acids, with Acetone and Isopropyl-alcohol, will be required: also a general acquaintance with the higher Alcohols and their chief derivatives.

The Ethylamines. Tetraethylammonium. Cacodyl. Zinc methyl. Silicon ethyl.

Ethylene and its chief derivatives. Glycol. Glycolic acid. Lactic acid. Glyoxal. Oxalic acid. Succinic acid. Malic acid. Tartaric acid. Citric acid.

Cyanogen and its compounds. Prussic acid. Cyanides and double Cyanides. Cyanic and Cyanuric acids. Sulphocyanides. Ureas.

Uric acid. Guanidine. Glycocyamine. Glycocyanidine. Sarkine. Creatine. Creatinine. Theobromine. Caffeine.

Glycerine and Allyl Alcohol, their chief derivatives. Constitution of Fats and Oils. Erythrite. Mannite. Glucose and Levulose. Cane-sugar. Milk-sugar. Cellulose Starch. Glycogen. Dextrine.

Aromatic compounds. Benzene. Toluene. Phenol. Cressol. Hydroquinone. Resorcin. Pyrocatechin. Pyrogallic acid. Oil of Bitter Almonds. Benzyl-alcohol. Benzoic acid. Benzophenone. Hippuric acid. Salicylic acid and Isomeric acids. Oxysalicylic acid. Gallic acid. Phtalic acid and Isomeric acids. Styrol (Cinnamic alcohol). Nitrobenzene. Aniline. Toluidine. Rosaniline. Diazobenzene and its compounds. Naphthalene. Anthracene. Oxanthraquinene. Alizarine. Indigo and Indol. Cymene. Camphor and Terpenes.

Glucosides. Amygdaline. Salicine. Tannine.

Alkaloids. Conine. Nicotine. Morphine. Strychnine. Quinine. Cinchonine.

Taurine. Lecithin. Choline. Albumen. Fibrin. Caseini.

Practical Examination.

Qualitative Analysis.—Substances will be given for analysis containing not more than two Acids and two Bases, Organic or Inorganic, but not more than one organic acid and one organic base. The Inorganic acids and bases to be those embraced in the FIRST B. Sc. Practical Examination; the Organic acids and bases to be selected from the following list:—

Oxalates, Acetates, Benzoates, Succinates, Tartrates, Urates, Gallates, Tannates, Cyanides, Double Cyanides, Alcohol, Starch, Grape-sugar, Urea, Morphia, Quinine, Strychnine.

V. BOTANY—TWO PAPERS AND A PRACTICAL EXAMINATION.

HISTOLOGY.

The structure of the Cell. The Chemical and Physical properties of Protaplasm. The nature and mode of origin of the contents of the Cell. The Chemical and Physical properties of the Cell-wall, and the mode in which it is added to. The Formation and Growth of Plant tissues by Cell-division. The Development of the Epidermal, Fibro-vascular, and Fundamental tissues from Primitive tissue.

MORPHOLOGY.

The distinguishing structural characters, geographical distribution, and the properties and uses of the following Natural Orders:—

Anonaceæ, Cruciferæ, Malvaceæ, Leguminosæ, Rosaceæ, Myrtaceæ, Cucurbitaceæ, Umbelliferæ, Rubiaceæ, Compositæ Apocyneæ, Convolvulaceæ, Labiatæ, Urticeæ, Euphorbiaceæ, Scitamineæ, Orchideæ, Amaryllideæ, Palmæ, Aroideæ, Gramineæ, Coniferæ, Cycadeæ, Solanaceæ.

Filices, Marsiliaceæ, Lycopodiaceæ, Musci, Hymenomycetes, Gasteromycetes, Physomycetes, Fucaceæ, Saccharomycetes, Schizomycetes.

The principles and practice of Classification.

PHYSIOLOGY.

The ultimate constituents of Plants. Composition of the Plant in successive stages of growth. The Materials of Plant-food; their general nature; the organs by which they are absorbed. Rotation of crops. Ascent of the Crude Sap. Respiration. Transpiration. The Descending Sap. Assimilation or general nature of the changes by which the Food Materials are converted into the various vegetable Tissues. Influence of Light and Temperature upon Plants. Increase of the Plant. Movements and special directions in Plants and their different parts. Vegetable irritability and Movements of Climbing Plants. General Phenomena of Sexual Reproduction; various modes in which flowers are fertilized. The intercrossing of Plants and its effects. Dimorphism and Trimorphism; Dichogamy. Germination. Causes of Variation. Origin of Species.

Practical Examination.

Each Candidate must be prepared to examine and dissect (microscopically when necessary) Plants or parts of Plants placed before him, selected with reference to their typical character as representing their respective natural orders; and to write descriptions of them.

VI. ZOOLOGY—TWO PAPERS AND A PRACTICAL EXAMINATION.

The principal facts of Structure and Development in the following Genera and Orders :—

GENERA.

Homo.	*Blatta.*
Erinaceus.	*Scorpio.*
Sus.	*Tegenaria* (or any spider).
Ovis.	*Oniscus.*
Columba.	*Cyclops.*
Gadus.	*Daphnia.*
Lepus.	*Lumbricus.*
Canis.	*Carcinus.*
Raia.	*Hirudo.*
Buccinum.	*Uraster.*
Limax.	*Echinus.*

ORDERS.

Primates.	*Brachiopoda.*
Cheiroptera.	*Polyzoa.*
Cetacea.	*Tunicata.*
Perissodactyla.	*Coleoptera.*
Proboscidea.	*Hemiptera.*
Sirenia.	*Hymenoptera.*
Edentata.	*Lepidoptera.*
Marsupialia.	*Diptera.*
Monotremata.	*Myriapoda.*
Struthionidæ.	*Cirripedia.*
Saururæ (Archæopteryx).	*Annelida polychæta.*
Lacertilia.	*Trematoda.*
Ophidia.	*Pteropoda.*
Chelonia.	*Cestodea.*
Crocodilia.	*Nematoidea.*
Pterosauria.	*Rotifera.*
Ichthyosauria.	*Turbellaria.*
Urodela.	*Crinoidea.*
Ganoidei.	*Cœlenterata.*
Dipnoi.	*Porifera.*
Elasmobranchii.	*Infusoria.*
Marsipobranchii.	*Radiolaria.*
Pharyngobranchii.	*Gregarinida.*
Cephalopoda.	*Foraminifera.*

The Affinities of these Groups, and their place in Classification. Meaning of the terms Species, Variety, and Race. Causes of Variation. Origin of Species.

Practical Examination.

Each Candidate must be prepared to examine, dissect, and describe such animals or such parts of animals as may be placed before him, selected from the previous list of Genera; and to examine prepared specimens illustrative of any of the Orders above enumerated, and to write descriptions of them.

VII. ANIMAL PHYSIOLOGY—Two Papers and a Practical Examination.

Chemical Composition of food. The quantities and kinds of food required to balance the losses of the economy.

The several processes to which the Food is subjected in Digestion.

Absorption in general; chyliferous and lymphatic Absorption.

The Blood, its organic and chemical constitution; phenomena and mechanism of Circulation.

Respiration, its mechanical and chemical actions; effects of its suppression.

Temperature of the Body; production and regulation of Animal Heat.

Secretion and Excretion; construction and operation of Secreting Apparatus. Chemical composition and amount of the Urinary, Cutaneous and Pulmonary excretions.

Muscular and other Contractile substance; phenomena presented by acting Contractile substance.

Nutrition, Growth, and Reparation.

The Mechanism of Locomotion, Voice and Speech.

Constitution and Functions of Nervous System. Distinction of Motor and Sensory Nerves or Nerve-fibres. Phenomena presented by Nerves in action Influence on Contractile Tissue.

Functions of Brain, Spinal Cord, and Ganglia. Sensation, Voluntary Motion, Reflex Action. Inhibitory Action. Influence of Nervous System on Heart and Blood-vessels, and on Secreting Organs.

Organs of the Senses and their functions.

Reproductive Organs and their functions.

Changes produced in the Ovum by impregnation. Outline of the Development of the Embryo and its

Envelopes. Nutrition of the Fœtus. Changes which occur at Birth in the Fœtus and in the Parent. Lactation.

Changes which take place with Age in the Proportions of the Body; in the Skeleton; in the Dentition; and in the Reproductive Apparatus.

Differences between Man and Woman other than in the Reproductive Organs.

Senile Decay.

Somatic and Molecular death.

Practical Examination.

Each Candidate must be prepared (1) to examine and describe Microscopical specimens of Animal tissues and organs; (2) to make Microscopical preparations of Animal tissues and organs; (3) to prove his practical acquaintance with the chemistry of albumen and its allies, milk, the digestive juices and their actions, blood urine, and glycogen. Also to show his practical acquaintance with the most important Apparatus used in studying the Physiology of muscle, nerve, the circulatory and respiratory systems, and the organs of sense.

VIII. PHYSICAL GEOGRAPHY AND GEOLOGY—TWO PAPERS AND A PRACTICAL EXAMINATION.

The General Distribution of Land and Water on the Surface of the Globe.

The composition of Sea-Water.

The boundaries, communications, depth, and general form of the floor of the Arctic, Pacific, and Atlantic Basins.

The Chief Ocean Currents.

Marine Denudation. The formation of Cliffs and Beaches; of Shingle, Sand, and Mud; Transport and Deposit of the Products of Denudation by the Sea.

The formation of Mineral Deposits by marine organisms.

Inland Seas, the Peculiarities of the Mediterranean, the Baltic, the Black Sea, the Caspian, and the Dead Sea.

Ice-floes and Shore-ice.

The commoner materials of which the Crust of the Earth is made up: Clay; Quartz; Sandstone; Limestone; Slate; Gneiss; Granite; Trap.

Stratified and Unstratified Rocks; Faults; Dykes; Metamorphism; Cleavage.

Average height of Continents; direction and general character of the principal Mountain-chains. Watersheds. River and Lake Basins. Special characteristics of particular River-basins. Area and general character of the North-American Lake-system.

The great Plains; Steppes; Tundras; Pampas; Sahara; Peatbogs.

Rainfall; Denudation and Transport of Materials effected by Rain and Rivers; River-valleys; Cañons; Deltas; Bars; Lacustrine Deposits. The share taken by fresh-water organisms in the formation of Lacustrine Deposits.

Snow and Ice; Glaciers and Icebergs as agents of denudation and transport.

The Atmosphere and its Currents. Trade-winds and Monsoons. The Air as an agent of transport of organic and inorganic matters.

The structure and mode of formation of Volcanoes. Volcanic products. Earthquakes. Elevation of land. Raised beaches.

The conditions of Climate; causes of differences between the climate of localities equidistant from the Equator.

Distribution of Terrestrial Plants and Animals. Botanical and Zoological Provinces. Distinctive characters of Floræ and Faunæ of different regions.

General distributions of Marine Plants and Animals. Fauna and Flora of the Deep Sea.

The nature of the processes by which the remains of Animals and Plants are preserved and fossilized.

The general features of the Quaternary epoch; River Gravels; Drift; Boulder-Clay. Characteristic Fossils.

The general features of the Tertiary epoch: the relations of the Miocene Fauna and Flora with those of earlier and later epochs.

The nummulitic formation: its extent, and the probable physical conditions under which it was produced.

The Cretaceous epoch. Extent of the Chalk formation; the physical conditions under which it was produced.

The relations of the Cretaceous Fauna and Flora with those of earlier and later epochs.

The Wealden and Purbeck formations; the conditions under which they were deposited, and their most characteristic organic remains.

General nature of the Oolitic and Liassic formations. Age of Reptiles. Distinctive features of Mammalian remains of Stonesfield slates. Invertebrata characteristic of Mesozoic epoch.

Rhætic and Triassic formations; conditions of deposition, Distinctive Organic remains. Salt-beds.

Permian formation. Its extent and relations. Palæozoic character of its Invertebrate Fauna. Characteristic Vertebrata.

Carboniferous formation; conditions of depositions; formation of Coal; characteristic Fauna and Flora.

Devonian formation and the Old Red Sandstone; conditions of deposition; characteristic Fishes.

General characters of the Silurian, Cambrian, and Laurentian formations.

The earliest known Forms of life and the Invertebrata characteristic of the Palæozoic epoch.

Mineral veins. The ordinary modes of occurrence of Lead, Tin, Iron, Copper, Silver, and Gold.

Practical Examination.

Candidates will be expected to identify and describe specimens of the principal Rocks, and of the Fossils characteristic of the Formations above enumerated.

IX. LOGIC AND PSYCHOLOGY.

Names, Notions, and Propositions.
Syllogism.
Induction and subsidiary operations.
The Senses.
The Intellect.
The Emotions.
The Will.
The Theories of Ethics.

50. On the Fourth Monday in November, the Examiners will publish a list of successful Candidates in two Classes and Pass, the names in each Class and Pass being arranged in alphabetical order.

51. A Certificate will be given to those who pass the Examination. (*Vide* Form Q.)

MASTER OF ARTS.

52. The Examination for the Degree of Master of Arts will be held annually in Bombay, commencing on the Third Monday in November.

53. Any person, being a Bachelor of Arts in the University of Bombay, may be admitted to the Examination for the Degree of Master of Arts; and should he pass the Examination in any one of the above branches, he will be admitted to the degree of M.A., on the expiration of five years from the date of his Matriculation.

54. Candidates must forward an application to the Registrar at least three months before the Examination. (*Vide* Form R.)

55. Each Candidate must pay to the Registrar a fee of Rs. 50, for which a receipt will be given. (*Vide* Form S.)

56. Failure to pass the Examination will not disqualify the Candidate for presenting himself at any subsequent M.A. Examination, on a new application being forwarded, and a fresh fee paid.

57. The Examination will comprise the following branches :—

I.—Languages.

II.—History and Philosophy.

III.—Mathematics.

IV.—Natural Sciences.

I.—Languages.—Six papers.

Candidates must take up English, with one or more of the following :—Latin, Greek, Sanskrit, Hebrew, Arabic, and Persian.

The subjects in each Language will be announced by the Syndicate two years before the Examination.

The following papers will be set :—

1st and *2nd*. Questions on the English books taken up by the Candidates, including points of Scholarship, Comparative Philology, Criticism, and the History of Literature.

3rd and *4th*. Similar questions on the Latin and Greek, Sanskrit, Hebrew, Arabic, or Persian books taken up by the Candidates.

5th. Translation from English into the second language, and *vice versâ.*

6th. Original English Composition in Prose or Verse.

II.—HISTORY AND PHILOSOPHY.—Six papers.

1st and *2nd.* Questions on a period to be announced by the Syndicate two years before the examination, including Constitutional Law, Manners, Literature, Political Geography, and Etymology.

3rd. Politics as a Science, including Political Economy.

4th. Logic, including the Philosophy of the Inductive Sciences.

5th. The History of Greek Philosophy.

6th. The History of Modern Philosophy, from the time of Charlemagne to the end of the 18th century.

In lieu of the 5th and 6th papers, a Candidate may bring up—

(*a.*) Historical or external Evidences of Christianity.

(*b.*) Moral or internal Evidences of Christianity.

III.—MATHEMATICS.—Six papers.

1st. Euclid and Geometrical Conic Sections.

2nd. Algebra and Trigonometry.

3rd. Newton's Principia, Book I., §§ I.—III., and Astronomy.

4th. Analytical Geometry and Differential and Integral Calculus.

5th. Statics and Dynamics.

6th. Hydrostatics and Optics.

IV.—NATURAL SCIENCES.—Six papers.

(*a.*) { Zoology, Comparative Anatomy, and Physiology
Botany and Vegetable Physiology.
Geology. }

(*b.*) { Chemical Physics.
Inorganic Chemistry.
Meteorology and Physical Geography. }

The Candidate will be required to select for examination one of the sub-sections *a* and *b*, and to be acquainted with the history of the sciences therein enumerated.

58. In the week following the Examination, the Examiners in each branch will publish a list of successful Candidates in two Classes and Pass, the names in each Class and Pass being arranged in alphabetical order.

59. A Certificate will be given to those who pass the Examination. (*Vide* Form T.)

II. LAW.

BACHELOR OF LAWS.

1. The Examination for the Degree of Bachelor of Laws will be held annually at Bombay, commencing on the Third Monday in November.

2. No Candidate shall be admitted to the Examination unless he be a Bachelor of Arts or Bachelor of Science of at least two years' standing in the University of Bombay, or some University recognized by it, and unless he produce certificates to the effect that he has attended, for periods amounting to at least three years, three-fourths of the Lectures proper to his class, in some School or Schools of Law recognized by the University.

3. Application must be made to the Registrar two months before the Examination. (*Vide* Form U.)

4. Each Candidate must pay to the Registrar a fee of Rs. 30, for which a receipt will be given. (*Vide* Form V.)

5. Failure to pass the Examination will not disqualify the Candidate for presenting himself at any subsequent Examination, on a new application being forwarded and a fresh fee paid.

6. Candidates for the Degree of Bachelor of Laws will be examined in the principles of Jurisprudence and in the several systems of Municipal Law administered by the High Court of Bombay.

There will be six papers, namely :—

1. Roman Civil Law. Elements of General Jurisprudence and International Law.
2. Succession and Family Rights, with special reference to Hindu and Mahomedan Law.
3. The Law of Contracts, and of the Transfer and Lease of Immoveable Property.
4. Equity with special reference to the Law of Trust, Mortgages and other securities for money, and Specific Relief.
5. The Law of Torts and Crimes.
6. The Law of Evidence, Civil Procedure, including Limitation and Criminal Procedure.

7. The Examination will be conducted by means of printed papers.

8. On the morning of the Second Monday after the commencement of the Examination, the Examiners will arrange and publish in two Divisions, each in alphabetical order, the names of such of the Candidates as may have passed.

9. A Certificate will be given to those who pass the Examination. (*Vide* Form W.)

HONOURS.

10. The Examination for Honours in Law will commence on the First Monday in the First Term in Arts.

11. The Examination will be open to any Candidate who has passed the Examination for the Degree of Bachelor of Laws held in one of the three years next preceding such Honours Examination.

12. Candidates must forward an application to the Registrar at least two months before the Examination. (*Vide* Form X.)

13. Each Candidate must pay to the Registrar a fee of Rs. 50, for which a receipt will be given. (*Vide* Form Y.)

14. Each Candidate for Honours will be examined in each of the following subjects:—

(*a*.) Roman Civil Law.

(*b*.) General Jurisprudence, including International Law.

(*c*.) The several systems of Municipal Law which obtain in India.

Three papers will be set, one in each subject (*a*), (*b*), and (*c*): each paper may be divided into two parts, three hours being allowed to each part.

15. The Examination will be conducted by means of printed papers.

16. The Examiners will publish, on the Friday in the ensuing week, lists of the successful Candidates in two Classes, the names in each Class being arranged in alphabetical order. No Candidate shall be placed in the First Class unless the Examiners are of opinion that he has exhibited considerable original ability as well as great industry.

III. MEDICINE.

LICENTIATE OF MEDICINE AND SURGERY.

1. A Candidate for the Degree of Licentiate of Medicine and Surgery must have passed the Matriculation Examination of the University of Bombay, or of some University recognized by it. He must have been engaged during four University years in professional study at a School of Medicine.

2. The Candidate will be required to pass two Examinations.

FIRST EXAMINATION IN MEDICINE.

3. The First Examination in Medicine will be held annually at Bombay, commencing on the First Monday after twelfth September.

4 No Candidate shall be admitted to the Examination unless he have produced Certificates to the following effect:—

(*a.*) Of having completed his nineteenth year.

(*b*) Of having been engaged in Medical studies for at least two University years.

(*c*) Of having attended the following Courses:—

In Descriptive Anatomy.	2 Courses, each of at least 70 lectures.
In Physiology and General Anatomy.	2 Courses, each of at least 70 lectures.
In Chemistry	2 Courses, each of at least 70 lectures.
In Botany	2 Courses, each of at least 30 lectures.
In Materia Medica . ..	2 Courses, each of at least 60 lectures.
In Practical Chemistry, including General and Pharmaceutical Chemistry and the Detection of the Adulteration of Drugs.	2 Courses of instruction, each of three months.

In Practical Pharmacy.	1 Course of instruction of at least four months; producing a certificate of having acquired a practical knowledge of the preparation and compounding of Medicines.

(*d*). Of having been engaged in Dissection for two First Terms in Medicine, in the course of which he must have dissected the whole human body twice.

5. Candidates must apply to the Registrar two months before the Examination. (*Vide* Form AA.)

6. Each Candidate must pay to the Registrar a fee of Rs. 20, for which a receipt will be given (*Vide* Form AB.)

7. Failure to pass the Examination will not disqualify the Candidate for presenting himself at any subsequent First Examination in Medicine, on a new application being forwarded and a fresh fee paid.

8. Candidates will be examined in the following subjects:—

1. Anatomy, Descriptive and Practical.
2. Physiology and Histology.
3. Chemistry, including Practical Chemistry, General and Pharmaceutical Chemistry, and Detection of the adulteration of Drugs.
4. Botany,* Materia Medica, and Pharmacy.

N.B.—A Candidate who has passed the Examination for the Degree of B. Sc. in Chemistry and in Botany shall be exempted from the examination in these subjects at the First Examination in Medicine.

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* In Systematic Botany the Candidate will be required to possess a competent acquaintance with the following Natural Orders (excepting those printed in italics, in which only a general knowledge will be expected :—

Anonaceæ, Menispermeæ, Nymphæaceæ, *Nelumbiaceæ*, Papaveraceæ, Cruciferæ, *Capparideæ*, Malvaceæ, *Sterculiaceæ*, Aurantiaceæ, Guttiferæ, Sapindaceæ Meliaceæ, Vitaceæ, Anacardiaceæ, Leguminosæ, Rosaceæ, Myrtaceæ, Cucurbitaceæ, Umbelliferæ, Cinchonaceæ, Compositæ, Asclepiadiaceæ, Apocynaceæ, Bignoniaceæ, Convolvulaceæ Scrophulariaceæ, Solanaceæ, *Atropaceæ*, Labiatæ, Verbenaceæ, Acanthaceæ, Lauraceæ, Euphorbiaceæ, *Urticiceæ*, Artocarpaceæ, Coniferæ, Orchidaceæ, Zingiberaceæ, *Cannaceæ*, *Amaryllidaceæ*, Liliaceæ, *Melanthaceæ*, Palmaceæ, *Araceæ*, Gramineæ; and with the structure of the Cryptogamic orders.

9. The Examination will be written and practical. Oral Examination of Candidates will be left to the discretion of Examiners

10 On the Second Monday after the commencement of the Examination, the Examiners will publish a list of the successful Candidates, arranged in two Divisions, in alphabetical order

11 A Certificate will be given to those who pass the Examination. (*Vide* Form AC)

EXAMINATION FOR THE DEGREE OF L M. AND S.

12. The Examination for the Degree of Licentiate of Medicine and Surgery will be held annually in Bombay, commencing on the Fourth Monday in November.

13. No Candidate will be admitted to this Examination within two years of the time of his passing the First Examination.

14 Each Candidate must, subsequently to passing the First Examination, have attended the following courses .—

In Medicine	2 Courses, each of at least 70 lectures.
In Surgery.....	2 Courses, each of at least 70 lectures
On Diseases of the Eye ..	2 Courses, each of at least 20 lectures.
On Midwifery and Diseases of Women and Children .	2 Courses, each of at least 60 lectures.
In Medical Jurisprudence and Practical Toxicology	2 Courses, of at least 60 lectures in the aggregate
In Pathology	1 Course, of at least 30 lectures.
In Hygiene	1 Course, of at least 20 lectures.

and have dissected the surgical regions, and performed operations on the dead subject, during two terms in Medicine, and have attended a Lying-in Hospital for nine months and have conducted Midwifery cases, and have attended Hospital practice during a period of at least two University years, in the following manner, *viz.*.—

(*a.*) Eighteen months at the Medical practice of a recognized Hospital or Hospitals (during at least nine of which he must have officiated as Clinical Clerk) with lectures on Clinical Medicine during such attendance.

(*b.*) Eighteen months at the Surgical Practice of a recognized Hospital or Hospitals (during at least nine of which he must have officiated as Surgical Dresser), with lectures on Clinical Surgery during such attendance; and

(*c.*) Six months at the Practice of an Eye Infirmary.

15. Each Candidate will be required to produce reports of six Medical and of six Surgical cases, drawn up and written by himself, during the periods of service as Clinical Clerk and Surgical Dresser, respectively, the said reports to be duly authenticated by the Professors of Clinical Medicine and Surgery; and must produce a certificate of good moral conduct from the Head of the College in which he has studied.

16. Candidates must apply to the Registrar two months before the Examination. (*Vide* Form AD.)

17. Each Candidate must pay to the Registrar a fee of Rs. 30, for which a receipt will be given. (*Vide* Form AE.)

18. Failure to pass the Examination will not disqualify the Candidate for presenting himself at any subsequent Examination for the degree of Licentiate of Medicine and Surgery, on a new application being forwarded and a fresh fee paid.

19. Candidates will be examined in the following subjects:—

1. Principles and Practice of Medicine, including Pathology.
2. Principles and Practice of Surgery, including Surgical Anatomy and Ophthalmic Surgery.
3. Midwifery, and Diseases of Women and Children.
4. Medical Jurisprudence, including practical Toxicology and Hygiene.

20. The Examination will be written and practical. Oral Examination will be left to the discretion of the Examiners.

21. The Clinical Examination in Medicine and Surgery will be conducted in the Wards of a Hospital, and will be of a nature faithfully and fully to test the Candidate's practical ability in taking, recording and treating cases of disease, investigating the pathology of disease, microscopically, chemically, and otherwise, and in surgical manipulations.

22. The Examination in Surgery will include the performance of surgical operations on the dead body.

23. On the Second Monday after the commencement of the Examination, the Examiners will publish a list of the successful Candidates, arranged in two divisions, in alphabetical order.

24. A Certificate will be given to those who pass the Examination. (*Vide* Form AF.)

DOCTOR OF MEDICINE.

25. The Examination for the Degree of Doctor of Medicine will be held annually at Bombay, commencing on the Third Monday in the First Term in Arts.

26. Each Candidate must have obtained the Degree, at least, of Bachelor of Arts or Bachelor of Science in the University of Bombay, or some University recognized by it, and must have regularly attended the Medical and Surgical practice of a recognized Hospital or Hospitals for a period of two years subsequent to his having taken a Degree in Medicine and Surgery at the University of Bombay or some University recognized by it; and must produce a certificate of his having attended a course of 30 Lectures in Comparative Anatomy.

27. Each Candidate must produce testimonials, signed by at least two Doctors of Medicine, that he is, in habits and character, a fit and proper person for the degree of Doctor of Medicine.

28. Candidates must apply to the Registrar two months before the Examination. (*Vide* Form AG.)

29. Each Candidate must pay to the Registrar a fee of Rs. 100, for which a receipt will be given. (*Vide* Form AH.)

30. Candidates will be examined in Medicine, including—

1. Practice of Physic.
2. Surgery.
3. Midwifery.
4. Comparative Anatomy.

N.B.—A Candidate who has passed the Examination for the Degree of B. Sc. in Zoology, shall be exempted from the examination in Comparative Anatomy for the Degree of Doctor of Medicine.

31. The Examination will be (*a*) written (one paper being set in each of the above subjects), (*b*) oral, (*c*) clinical, in the wards of a hospital, and (*d*) practical, in a dissecting-room.

32. On the Second Monday after the commencement of the Examination, the Examiners will publish a list of the successful Candidates, arranged in alphabetical order.

33. A Certificate will be given to those who pass the Examination. (*Vide* Form AI.)

IV. CIVIL ENGINEERING.

LICENTIATE OF CIVIL ENGINEERING.

1. A Candidate for the Degree of Licentiate of Civil Engineering must have passed the Matriculation Examination of the University of Bombay, or of some University recognized by it.

2. A Candidate will be required to pass two Examinations, the one to be called the First Examination in Civil Engineering, and the other the Examination for the Degree of Licentiate of Civil Engineering.

FIRST EXAMINATION IN CIVIL ENGINEERING.

3. The First Examination will be held annually in Bombay, commencing on the First Monday in November.

4. No Candidate will be admitted to this Examination unless he produce satisfactory testimonials of having kept four terms in a School or College of Civil Engineering recognized by the University of Bombay.

N.B.—Two of the required terms will be remitted in the case of Candidates who have kept two or more terms in a College or Institution in Arts recognized by the University of Bombay, and three in case of a Bachelor of Science.

5. Candidates must apply to the Registrar two months before the Examination. (*Vide* Form AJ.)

6. Each Candidate must pay to the Registrar a fee of Rs. 20, for which a receipt will be given. (*Vide* Form AK.)

7. Failure to pass the Examination will not disqualify the Candidate for presenting himself at any subsequent First Examination, on a new application being forwarded and a fresh fee paid.

8. Candidates will be examined in the following subjects:—

I.—MATHEMATICS AND NATURAL PHILOSOPHY.
Four papers.

1st. (*a.*) *Arithmetic*, with the nature and use of Logarithms.

(*b.*) *Algebra*—to Quadratic Equations, inclusive, with the Progressions and the Binomial Theorem.

2nd. (*a.*) *Euclid.*—The first four and the sixth Books with the Definitions of the fifth Book, and the eleventh Book to Proposition XXI.

(*b.*) *Trigonometry.*—Solution of Plane Triangles with expressions for the area.

3rd. *Statics.*—Composition and Resolution of Forces. Centre of Gravity. The Mechanical Powers.

4th. (*a.*) *Dynamics.*—Laws of Motion. Falling Bodies. Circular Motion. Projectiles. Impact.

(*b.*) *Hydrostatics.*—Fluid Pressures. Equilibrium of Gases under varying pressures and temperatures. Specific Gravity. Hydrostatic Balance. Barometer. Pumps. Hydraulic Ram. Syphon. Bramah's Press. Steam Engine.

II.—EXPERIMENTAL AND NATURAL SCIENCE.
Two papers.

1st. (*a.*) *Heat.*—Measurement of Temperature. Thermometers and Pyrometers. Effects of Heat, Dilatation. Apparent and Real Expansion. Expansion of Gases. Boyle and Mariotte's Law. Maximum Density of Water. Compensating Pendulum and Balance. Barometric Corrections. Change of State. Specific and Latent Heat. Regelation. Vaporization. Ebullition. Elastic Force of Vapour. Formation of Dew. Hygrometers. Spheroidal Condition.

(*b.*) *Frictional Electricity.*

2nd. *Inorganic Chemistry.*—Metric System of Weights and Measures. Physical Properties of Matter. Simple and Compound Bodies. Conditions necessary

for Combination. Molecules. Molecular Attraction. Affinity. Mechanical and Chemical Solution. Laws of Combination. Atomic Theory. Equivalents. Law of Atomic Heat. Nomenclature. Symbolic Notation and Formulæ. Classification of Compound Bodies. Law of Gaseous Volumes. Vapour Densities. Methods adopted in the Determination of Atomic Weights. Calculation of Volume Weights. Diffusion of Gases. Quantivalence of Atoms. Phenomena of Crystallization. Isomorphism. Isomerism.

Occurrence, Preparation, and Properties of the Non-Metallic Elements and of their more important Compounds.

III.—Engineering.

Four papers, Examination of Drawings, and Oral.

1st. *Engineering Field Work.*—Surveying with the Chain only. Surveying with the Compass and Chain. The Theodolite and its adjustment. Levelling with the Dumpy and Y Level, and the adjustment of the same.

N.B.—A plotted Survey and Section, with the Survey and Level Books (certified as the work of the student by the Head of an Institution recognized in Civil Engineering), should be submitted to the Examiner by each Candidate.

2nd. *Materials used in Construction.*—Stone. Quarrying and Blasting. Manufacture and mode of testing the quality of Bricks and Tiles, Limes, Mortar, Cements, Concrete, Plaster. Timber. Methods of seasoning Timber. Preservation of Timber. Wrought and Cast Iron. Preservation of Iron. Steel. Bessemer Process. Paints and Varnishes.

3rd. *Masonry.*—Stone Masonry. Brickwork. Precaution against Settlement. Plain Arching. Different Forms of Arches and modes of describing them Foundations. Pile and Iron Tubular Foundations. Well Foundations.

4th. (*a*). *Roads.*—Earth, Moorum, and Metalled Roads. Gradient and Cross Section. Traction. Survey.

Lining out and Construction. Laying out Curves without an angular instrument. Tracing and Survey of Hill Roads. Maintenance and Repair.

(*b.*) *Earthwork.* Mensuration and setting out. Tools and Execution. Cuttings. Embanking and Puddling.

5*th.* *Engineering Drawing.*—Each Candidate will be required to exhibit *three* drawings, executed by him during his course of study at an affiliated Institution.

Each drawing to bear the following Certificate :—

Certified that this drawing was executed within the walls of_____ *by_____and completed on the _____

(Signed) _____

Principal of the

_____

Date _____

* Enter the name of the School or College of Engineering.

N B.—Each Candidate will also be required to execute in the presence of the Examiners a pen and ink sketch of a simple object to show proficiency in free hand-sketching. For this sketch two hours will be allowed.

TEXT-BOOK IN CIVIL ENGINEERING.

Such portions of the Roorkee Treatise on Civil Engineering as treat of the subjects above specified.

9. The Examination will be written and oral.

10. On the Third Thursday after the commencement of the Examination, the Examiners will publish a list of the successful Candidates in two Classes and Pass, the names in each Class and Pass being arranged in alphabetical order.

EXAMINATION FOR THE DEGREE OF L.C.E.

11. The Examination for the Degree of Licentiate of Civil Engineering will be held annually in Bombay, commencing on the First Monday in November.

12. No Undergraduate will be admitted to the Examination unless he shall have kept two terms in a School or College of Civil Engineering recognized by the University of Bombay subsequently to passing the First Examination.

13 Candidates must apply to the Registrar two months before the Examination. (*Vide* Form AL.)

14. Each Candidate must pay to the Registrar a fee of Rs. 30 for which a receipt will be given. (*Vide* Form AM.)

15. Failure to pass the Examination will not disqualify the Candidate for presenting himself at any subsequent examination for the Degree of Licentiate of Civil Engineering, on a new application being forwarded and a fresh fee paid.

16. Candidates will be examined in the following subjects.—

I. Mathematics and Natural Philosophy.
II Experimental and Natural Science.
III. Civil Engineering.
IV. One of the following to be selected by the Candidate:—

A. Analytical Geometry and Differential and Integral Calculus.
B. Optics and Astronomy.
C. Mining and Metallurgy.
D. Architecture.
E. Mechanical Engineering.
F. Chemical Analysis.
G. Botany and Meteorology.

I.—Mathematics and Natural Philosophy.
Four papers.

1st *Mensuration of Surfaces and Solids.*
2nd. (a.) *Geometric Conic Sections.*
(b.) *Analytical Geometry of Two Dimensions.*—Analytical Geometry of the right line and circle by Rectangular, Oblique, and Polar Co-ordinates.
3rd. *Statics and Dynamics.*
4th. *Hydrostatics.*

II.—Experimental and Natural Science.
Three papers—Oral and Practical.

1st *Inorganic Chemistry.*—The Chemistry of the principal Metals and their Salts. Qualitative Analysis of simple Salts.

2nd. (a). *Heat*—Propagation of Heat by Conduction, Radiation, and Convection. Absorption, Reflec-

tion, and Refraction of Heat. Diathermacy. Theory of Exchanges. Mechanical Theories of Heat, Mechanical and Chemical Equivalents. Different forms of Energy. Sources of Heat.

(*b.*) *Voltaic Electricity and Magnetism.*

3rd. *Geology.*—Definitions of Geological terms. The principal Rocks and their Component Minerals. Translation and Consolidation of Materials. Fossilization. Central Heat. Volcanoes. Earthquakes and other movements of the Earth's crust. Succession of Strata. Formation of Coal. Metamorphism of Rocks. Igneous Rocks. Geographical Distribution of the Stratified and Igneous Rocks in India. Mode of constructing Geological Maps and Sections.

4th. *Practical.*—(1) Qualitative Analysis, and (2) Recognition of the more important Rocks and Minerals.

5th. *Oral.*

TEXT BOOKS IN GEOLOGY.

Page's Introductory Text Book of Geology.

Elementary Manual of Geology (published by the Educational Department).

III.—CIVIL ENGINEERING.

Six papers—Examination of Drawings, and Oral.

1st.—*Engineering Field and Office Work.*

(*a.*) Triangulation and Traversing. Azimuth, Latitude and Longitude. Contouring. The adjustment and use of Surveying Instruments.

(*b.*) *Geometrical Drawing.*

N.B.—A plotted Triangulation, Traverse and Contour, together with the Field books of the same (certified by the Head of a recognized Institution as the actual work of the Student), should be submitted to the Examiners by each Candidate.

2nd. *Strength of Materials.*—Pressure. Tension. Torsion. Transverse strain. Factor of Safety. Deflection. Stability of Retaining-walls. Roofs

3rd. *Bridges*—Masonry Bridges. Centering.
Wooden Bridges.—Trussed and Girder Bridges. Scarfs, Joints, and Straps. Built Beams.
Iron Bridges.—Girder and Suspension.

4th. (*a.*) *Irrigation.*—Canals for Irrigation and Navigation. Sources of Supply. Quantity of Water required. Slope of bed and section of channel. Alignment of Canal. Falls, Rapids, and Locks. Drainage. Aqueducts. Inlets. Dams. Superpassages. Head Works. Regulators. Irrigational Tanks. Motion of Water through Pipes, in open Canals, and over Weirs.

(*b.*) *Harbours.*—Groins. Breakwaters. Quays. Basins. Docks and Jetties.

5th. *Specification and Estimating.*—A Specification and Estimate of a simple structure to be drawn up from data.

N.B.—Multiplication of dimensions will not be required.

6th. *Railways.*—Location. Gauges. Curves. Gradients. Formation. Tunnels. Level Crossings. Ballasting. Fencing. Permanent Way. Stations. Signals. Turn-tables and Triangles. Engine Sheds. Locomotive Engines. Traction.

7th. *Engineering Drawing.*—Each Candidate will be required to exhibit *three* Drawings, executed by him in an affiliated Institution subsequent to his passing the First Examination in Civil Engineering.

Each Drawing to bear the following certificate:—

Certified that this drawing was executed within the walls of _____ *by _____ and completed on the _____

(Signed) _____
Principal of the
_____

Date _____

* Enter the name of the School or College of Engineering.

N.B.—Each Candidate will also be required to execute in the presence of the Examiners a pen and ink sketch of a simple object, to show proficiency in free hand-sketching. For this sketch two hours will be allowed

TEXT BOOKS.

The Roorkee Treatise of Civil Engineering.
The Roorkee Manual of Surveying.

Rankine's Civil Engineering (omitting Part II., Chap. I., and Section I. of Chap. II.)

IV. ONE OF THE FOLLOWING, TO BE SELECTED BY THE CANDIDATE:—

A.—ANALYTICAL GEOMETRY OF TWO DIMENSIONS AND DIFFERENTIAL AND INTEGRAL CALCULUS.

Two papers.

1st. *Analytical Geometry.*—Equation to the Parabola. Polar Equation to the Parabola. Properties of the Parabola.

Equation to the Ellipse. Eccentric angle. Connection between Ellipse and Parabola. Polar Equation to the Ellipse. Properties of the Ellipse.

Equation to the Hyperbola. Asymptotes. Polar Equation to the Hyperbola. Properties of the Hyperbola.

2nd. (*a.*) *Differential and Integral Calculus.*—Differentiation of functions of one variable. Successive differentiation. Evaluation of indeterminate functions. Taylor's Theorem. Maxima and Minima.

(*b.*) *Integral Calculus.*—Elementary Examples in Integration.

B.—OPTICS AND ASTRONOMY.

Two papers.

1st. Reflection and Refraction at Plane and Spherical Surfaces. Dispersion of Light. The Rainbow. The Sextant, Lenses, the Telescope, the Eye.

2nd. Apparent motions of the Heavenly Bodies. Instruments. Phenomena depending on change of place. Atmospheric Refraction. Comparison of Diameters of Earth, Sun, Moon, and Planets. Ptolomaic and Copernican Systems. Eclipses. Sidereal, Solar, Mean, and Apparent Time. Latitude, Longitude, and Variation of the Compass.

C.—MINING AND METALLURGY.

Two papers.

1st. Physical Characters of Metals. Alloys. Crystalline Systems. Cleavage. Goniometers. Mineral Veins. Lodes and Beds. Mining Excavations.

Ventilation of Mines. Lighting of Workings. Driving of Levels, Drifts, and Windroads Means of Security to be adopted in Shafts. Pillar and Stall and Long wall systems of extracting Coal. Varieties of Coal. Comparative value of Fuels.

2nd. Mode of dressing Ores. Furnace Materials. Plays. Crucibles. The more important ores of the following metals, viz.:—Iron, Copper, Lead, Tin, Zinc, and Mercury. Iron smelting. Manufacture of Steel. Copper smelting. Refining and toughening crude Copper. Zinc smelting. Treatment of Mercurial ores. English and German methods of extracting Lead from its ores. Extraction of Silver from Lead ores. Pattinson's process.

TEXT BOOK.

Bloxam's Metals; their Properties and Treatment.

D.—ARCHITECTURE.

Two papers.

1st. The Classic Orders. Gothic Architecture

2nd. Characteristics of the Saracenic and Hindu Architecture.

TEXT BOOKS.

Parker's Introduction to the study of Gothic Architecture.
Fergusson's History of Architecture, Part III., Books I. to V. inclusive.

E.—MECHANICAL ENGINEERING.

One paper and practical.

1st. *Machinery.* The Steam Engine, including Land, Marine, and Locomotive Engines. Workshop machinery.

2nd. *Practical.* Candidates will be examined *practically* in one of the following, to be selected by the Candidate:—

1. Fitting.
2. Smith's Work.
3. Carpentry.

TEXT BOOKS.

Bourne's Catechism of the Steam Engine.

Campin's Principles and Practice of Machinery.

F.—CHEMICAL ANALYSIS.

One paper and practical.

Chemical Analysis.—Qualitative and Quantitative.

G.—BOTANY AND METEOROLOGY.

Two papers.

1.—*Botany, Structural and Systematic.*

In Systemtic Botany the characteristics, properties, uses and distribution of the following Natural Orders :—

Anonaceæ, Capparidaceæ, Malvaceæ, Aurantiaceæ, Sapindaceæ, Meliaceæ, Rhamnaceæ, Anacardiaceæ, Leguminosæ, Lythraceæ, Myrtaceæ, Cactaceæ, Rubiaceæ, Asclepiadaceæ, Apocynaceæ, Bignoniaceæ, Cordiaceæ, Boraginaceæ, Labiatæ, Verbenaceæ, Acanthaceæ, Santalaceæ, Euphorbiaceæ, Urticaceæ, Coniferæ, Cycadaceæ, Amaryllidaceæ, Palmæ, Cyperaceæ, Gramineæ.

Recognition of Specimens.

2.—*Meteorology—Meteorological Instruments.*

Barometer, Thermometer, Hygrometer, Rain-gauge and Anemometer, General Distribution of Atmospheric Pressure, Temperature, Wind and Rain over the surface of the Globe, and the Special Meteorology of India.

17. The Examination will be written, oral, and practical.

18. The practical Examination for the Degree of Licentiate of Civil Engineering will be conducted in a place appointed by the Examiners, and be of a nature to test fully the Candidate's practical ability in Subject II. and in E of Subject IV. of Regulation 17.

19. On the Third Thursday after the commencement of the Examination, the Examiners will publish a list of the successful Candidates in two Classes and Pass, the names in each Class and Pass being arranged in alphabetical order.

20. A Certificate will be given to those who pass the Examination. (*Vide* Form AN.)

MASTER OF CIVIL ENGINEERING.

21. The Examination for the Degree of Master of Civil Engineering will be held annually at Bombay, commencing on the Second Monday in the First Term in Arts and Civil Engineering.

22. Each Candidate must have obtained the Degree at least of Bachelor of Arts or Bachelor of Science in the University of Bombay, or some University recognized by it, and must have practised as a Civil Engineer for at least three years after receiving the Degree of Licentiate of Civil Engineering in the University of Bombay, or some University recognized by it.

23. Candidates must apply to the Registrar two months before the Examination. (*Vide* Form AO.)

24. Each Candidate must pay to the Registrar a fee of Rs. 50, for which a receipt will be given. (*Vide* Form AP.)

25. In the Examination, each Candidate will be required to submit, with due authentication, the working-drawings and specifications of such engineering works as may have been designed and executed by himself during the two previous years.

26. On the Second Monday after the commencement of the Examination, the Examiners will publish a list of the successful Candidates, arranged in alphabetical order.

27. A Certificate will be given to those who pass the Examination. (*Vide* Form AQ.)

GENERAL.

No question shall be put at any University Examination calling for a declaration of religious belief on the part of the Candidate; and no answer or translation given by any Candidate shall be objected to on the ground of its expressing any peculiarity of religious belief.

VII.

Forms.

I. ARTS.

MATRICULATION.

FORM A.

To

THE REGISTRAR of the UNIVERSITY of BOMBAY.

SIR,

I request permission to present myself at the ensuing Matriculation Examination of the University of Bombay.

I wish to be examined in the English and the _____ languages.

I wish to be examined at* _____

I am, Sir,
Your obedient Servant,

(Name, with surname, in the English and Vernacular characters) _____

Birth-place ..... { Village. Táluka. Zillah.

Birth-day ..... { According to Christian or Native Chronology.

Father's ..... { Name. Occupation.

(Race and Religion).. _____

(Where educated) .. _____

(Enter Post Office address) _____

(Date) _____

* Please insert one of the following centres of Examination :-

1. Bombay.	3. Ahmedabad	5. Karáchi
2 Poona.	4 Belgaum.	

I certify that _____ has been (in my School) or (under my tuition) from _____ to ____ and that I assent to the above application.

Signature of Applicant's last Schoolmaster or Teacher. } _____

Date { (*Enter Post Office address.*) _____
(*Enter day and year.*) _____

N.B.—If the period of School attendance or tuition named in the certificate be less than eight months, the applicant must also forward another certificate or other certificates signed by his last previous Instructor or Instructors, so as to cover altogether a period of not less than eight months.

When a student has been attending both a Public School and a Private Teacher at the same time, the certificate of the Master of the former will be required.

(1). *Certificate of Moral Character*, to be signed by a person of known respectability.

I certify that I have known _____ for _____ years, and believe him to be a person of good moral character.

(Signature) _____

Enter Post Office address) _____

(Date) _____

(2.) *Certificate of Age*, to be signed by a person of known respectability.

I certify that I have known the family of the above _____ for _____ years, and that, to the best of my knowledge and belief, he has completed his sixteenth year, or will have completed his sixteenth year before the commencement of the ensuing Matriculation Examination.

(Signature) _____

(Enter Post Office address) _____

(Date) _____

FORM B.

UNIVERSITY OF BOMBAY.

Received from _____ Rs. 10, being the fee for permission to attend the ensuing Matriculation Examination.

(Signature) _____

Registrar.

(Date) _____

FORM C.

UNIVERSITY OF BOMBAY.

I certify that the undersigned _____ duly passed the Matriculation Examination held in the month of _____ 188

(Signature of the holder)_____

(Signature)_____

Registrar.

(Date)_____

PREVIOUS EXAMINATION.

FORM D

To

The REGISTRAR of the UNIVERSITY of BOMBAY.

SIR,

I request permission to present myself at the ensuing Previous Examination. I wish to be examined in the English and _____ languages.

I am, &c.,

(Name) .....

(Race and Religion) .....

(College) .....

(Date of Matriculation) .....

(Date) { (Enter Post Office address) _____
(Enter Date) _____

Certificate to be signed by the Head of the College or Institution at which the Candidate may have attended.

I certify that _____ has attended since his Matriculation the number of days under specified, at the _____ of which I am _____

No. of days.	Remarks.
First Term 188 -8 . Second Term	

I further certify that, to the best of my knowledge and belief, the said _____ is a person of good conduct, and that he has my permission to present himself at the ensuing Previous Examination at the University of Bombay.

(Date)_____ (Signature)_____

FORM E

UNIVERSITY OF BOMBAY.

Received from_____ Rs 20, being the fee for permission to attend the ensuing Previous Examination.

(Signature)_____

(Date)_____ Registrar.

FIRST EXAMINATION FOR THE DEGREE OF B.A.

FORM F.

To

The REGISTRAR of the UNIVERSITY of BOMBAY.

SIR,

I request permission to present myself at the ensuing First Examination for the Degree of Bachelor of Arts. I wish to be examined in the English and____ ___ languages.

I am, &c.,

(Name) . ...
(Race and Religion) ....
(College) . .. .
(Date of Previous Examination)* .... .
(Enter Post Office address) ....
(Date)_____

Certificate to be signed by the Head of the College or Institution at which the Candidate may have attended.

I certify that _____ has attended since his passing the Previous Examination the number of days under specified, at the_____ of which I am_____

* If the Candidate has not passed the Previous Examination of this University, special application for admission to this Examination must be made under N B to Regulation 19 in Arts

No. of Days.	Remarks.
First Term 188 -8 ._____ Second Term	
First Term 188 -8 ._____ Second Term	

I further certify that, to the best of my knowledge and belief, the said_____ is a person of good conduct; and that he has my permission to present himself at the ensuing First Examination for the Degree of Bachelor of Arts at the University of Bombay.

(Date)_____ (Signature)_____

FORM G.

UNIVERSITY OF BOMBAY.

Received from_____ Rs. 20, being the fee for permission to attend the ensuing First Examination for the Degree of Bachelor of Arts.

(Signature)_____

(Date) _____ Registrar.

FORM H.

UNIVERSITY OF BOMBAY.

I certify that the undersigned_____ satisfied the Examiners at the First Examination for the Degree of Bachelor of Arts, held in the month of_____ 188 ; and was placed in the_____ Class.

(Signature of the holder) _____

(Signature)_____

(Date)_____ Registrar.

B 1066—10 BU

SECOND EXAMINATION FOR THE DEGREE OF B.A

FORM I.

To

The REGISTRAR of the UNIVERSITY of BOMBAY.

SIR,

I request permission to present myself at the ensuing Second Examination for the Degree of Bachelor of Arts.

In addition to the necessary subject, I offer to be examined in the_____language, and in*_____

I am, &c.

(Name) ....._____
(Race and Religion) ..... _____
(College) ....._____
(Date of Previous Examination)..._____
(Enter Post Office address) ..... _____
(Date)_____

Certificate to be signed by the Head of the College or Institution at which the Candidate may have attended.

I certify that_____has attended, since his passing the Previous Examination, the number of days under specified, at the†_____ of which I am_____

Number of Days.	Remarks.
First Term 188 -8 ._____ Second Term	
First Term 188 -8 ._____ Second Term	
First Term 188 -8 ._____ Second Term	

Insert one of the following groups, with particulars as to the sub-divisions taken up :—

A. Language and Literature.—B History and Political Economy. -C. Logic and Moral Philosophy.—D. Mathematics. -E. Natural Science

† Insert the words the Previous Examination or the First Examination for the Degree of B A., as the case may be

I further certify that, to the best of my knowledge and belief, the said _____ is a person of good conduct; and that he has my permission to present himself at the ensuing Second Examination for the Degree of Bachelor of Arts at the University of Bombay.

(Signature) _____

(Date) _____

FORM J.

UNIVERSITY OF BOMBAY.

Received from _____ Rs. 10, being the fee for permission to attend the ensuing Second Examination for the Degree of Bachelor of Arts.

(Signature) _____

(Date) _____ Registrar.

FORM K.

UNIVERSITY OF BOMBAY.

I certify that the undersigned _____ satisfied the Examiners at the Second Examination for the Degree of Bachelor of Arts, held in the month of _____ and was placed in the _____ Class.

(Signature of the holder) _____

(Date) _____ (Signature) _____

Registrar.

FIRST EXAMINATION FOR THE DEGREE OF B.Sc.

FORM L.

To

The REGISTRAR of the UNIVERSITY of BOMBAY.

SIR,

I request permission to present myself at the ensuing First Examination for the Degree of Bachelor of Science.

I am, &c.

(Name) .....
(Race and Religion) .....
(College)..... .....
(Date of Previous Examination)-...
(Enter Post office address).....
(Date).....

Certificate to be signed by the Head of the College or Institution at which the Candidate may have attended.

I certify that _____ has attended, since his passing the Previous Examination, the number of days under specified, at the _____ of which I am _____

Number of Days.	Remarks.
First Term 188 -8 . Second Term	
First Term 188 -8 . Second Term	

I further certify that, to the best of my knowledge and belief, the said _____ is a person of good conduct; and that he has my permission to present himself at the ensuing First Examination for the Degree of Bachelor of Science at the University of Bombay.

(Signature)_____

(Date) _____

* If the Candidate has not passed the Previous Examination of this University, special application for admission to this Examination must be made under *N. B.* to Regulation 38 in Arts.

FORM M.

UNIVERSITY OF BOMBAY.

Received from _____ Rs. 20, being the fee for permission to attend the ensuing First Examination for the Degree of Bachelor of Science.

(Signature) _____

(Date) _____ Registrar.

FORM N.

UNIVERSITY OF BOMBAY.

I certify that the undersigned _____ satisfied the Examiners at the First Examination for the Degree of Bachelor of Science, held in the month of _____ and was placed in the _____ Class.

(Signature of the holder) _____

(Signature) _____

(Date) _____ Registrar.

SECOND EXAMINATION FOR THE DEGREE OF B.Sc.

FORM O.

To

The REGISTRAR of the UNIVERSITY of BOMBAY.

SIR,

I request permission to present myself at the ensuing Second Examination for the Degree of Bachelor of Science.

I offer to be examined in*

(1) _____

(2) _____

(3) _____

I am, &c.

---

* Insert three of the following nine subjects, *one* at least of which must be chosen from among No III.—VIII :—

I, Pure Mathematics ; II, Applied Mathematics ; III, Experimental Physics ; IV, Chemistry ; V, Botany ; VI, Zoology ; VII, Animal Physiology ; VIII, Physical Geography and Geology ; IX, Logic and Psychology.

(Name) ..... _____
(Race and Religion) ..... _____
(College) ..... _____
(Date of First Examination for the Degree of B.Sc.) ... . _____
(Enter Post Office address)... .... _____
(Date)_____

Certificate to be signed by the Head of the College or Institution at which the Candidate may have attended.

I certify that_____has attended, since his passing the First Examination for the Degree of Bachelor of Science, the number of days under specified, at the_____of which I am_____

Number of Days.	Remarks.
188 -8 First Term	
188 -8 Second Term	

I further certify that, to the best of my knowledge and belief, the said _____ is a person of good conduct, and that he has my permission to present himself at the ensuing Second Examination for the Degree of Bachelor of Science at the University of Bombay

(Signature)_____

(Date)_____

FORM P.

UNIVERSITY OF BOMBAY.

Received from_____ Rs. 10, being the fee for permission to attend the ensuing Second Examination for the Degree of Bachelor of Science.

(Date)_____ (Signature)_____
Registrar.

FORM Q.

UNIVERSITY OF BOMBAY.

I certify that the undersigned _____ satisfied the Examiners at the Second Examination for the Degree of Bachelor of Science, held in the month of _____, and was placed in the _____ Class.

(Signature of the holder) _____

(Date) _____ (Signature) _____
Registrar.

MASTER OF ARTS.

FORM R.

To

The REGISTRAR of the UNIVERSITY of BOMBAY.

SIR,

I request permission to present myself for Examination for the Degree of Master of Arts in the University of Bombay.

I offer to be examined in* _____

I am, &c.,

(Name and Degree) _____
(Race and Religion) _____
(College) _____
(Date of Graduation) _____
(Enter Post Office address.) _____
(Date) _____

* Insert one or more of the following :—

1. The English and _____ languages.
2. History and Philosophy.
3. Mathematics.
4. Natural Sciences.

FORM S.

UNIVERSITY OF BOMBAY.

Received from _____ Rs. 50, being the fee for permission to attend the ensuing Examination for the Degree of Master of Arts.

(Signature) _____

(Date) _____ Registrar.

FORM T.

UNIVERSITY OF BOMBAY.

I certify that the undersigned _____ satisfied the Examiners in* _____ at the Examination for the Degree of Master of Arts held in the month of _____

(Signature of the holder) _____

(Signature) _____

(Date) _____ Registrar.

---

* Specify the branch or branches of Examination.

II. LAW.

EXAMINATION FOR THE DEGREE OF LL.B.

FORM U.

To

The REGISTRAR of the UNIVERSITY of BOMBAY.

SIR,

I request permission to present myself at the ensuing Examination for the Degree of Bachelor of Laws.

I am, &c.

(Name) .....

(Race and Religion) .....

(College) .....

(Date of Graduation in Arts or Science) .....

(Enter Post Office address) .....

(Date) .....

Certificate to be signed by the Head of the School of Law in which the Candidate may have studied.

I certify that ..... has studied in the ..... of which I am ..... as under specified:—

Period of Study.		Remarks.
From	To	

(Signature) .....

(Date) .....

N.B.—If the Candidate has not studied for the requisite period in one School of Law, he must furnish supplementary Certificates in the above tabular form.

N.B.—If the applicant is not a Graduate of the University of Bombay, he must append a certificate of graduation,

and testimonials of moral character, satisfactory to the Syndicate.

FORM V.

UNIVERSITY OF BOMBAY.

Received from _____ Rs. 30, being the fee for permission to attend the ensuing Examination for the Degree of Bachelor of Laws.

(Signature)_____

(Date)_____ Registrar.

FORM W.

UNIVERSITY OF BOMBAY.

I certify that the undersigned_____satisfied the Examiners at the Examination for the Degree of Bachelor of Laws held in the month of_____, and was placed in the _____ Division.

(Signature of the holder)_____

(Signature)_____

(Date)_____ Registrar.

EXAMINATION FOR HONOURS IN LAW.

FORM X.

To

The REGISTRAR of the UNIVERSITY of BOMBAY.

SIR,

I request permission to present myself at the ensuing Examination for Honours in Law.

I am, &c.,

(Name) .....

(Date of Graduation in Law) .....

(Enter Post Office address).....

(Date)_____

FORM Y.

UNIVERSITY OF BOMBAY.

Received from _____Rs. 50, being the fee for permission to attend the ensuing Examination for Honours in Law.

(Signature)_____

Registrar.

(Date) _____

III. MEDICINE.

LICENTIATE OF MEDICINE AND SURGERY.

FIRST EXAMINATION IN MEDICINE, FORM AA.

To

The REGISTRAR of the UNIVERSITY of BOMBAY.

SIR,

I request permission to present myself at the ensuing First Examination in Medicine in the University of Bombay.

I am, &c.,

(Name) .... _____
(Race and Religion) ..... _____
(College) .. _____
(Date of Graduation, or Matriculation, as the case may be) ..... } _____
(Enter Post Office address)..... _____
(Date) _____

CERTIFICATES.

(1) I certify that _____, to the best of my knowledge and belief, has completed his nineteenth year.

(Signature of some person of known respectability) .... } _____
(Date) _____

---

(2) I certify that _____, to the best of my knowledge and belief, is a person of good moral conduct; and that he has my permission to present himself at the ensuing First Examination in Medicine.

(Signature of Head of School of Medicine) _____
(Date) _____

---

(3) I certify that _____ has been engaged in Medical Study in the School of Medicine _____ for two University years.

(Signature of Head of School of Medicine) _____
(Date) _____

(4) I certify that _____ has attended two Courses of Lectures in Descriptive Anatomy, each of _____ Lectures.

(Date) _____ (Signature) _____

---

(5) I certify that _____ has attended two Courses of Lectures in Physiology and General Anatomy, each of _____ Lectures.

(Date) _____ (Signature) _____

---

(6) I certify that _____ has attended two Courses of Lectures in Chemistry, each of _____ Lectures.

(Date) _____ (Signature) _____

---

(7) I certify that _____ has attended two Courses of Lectures in Botany, each of _____ Lectures.

(Date) _____ (Signature) _____

---

(8) I certify that _____ has attended two Courses of Lectures in Materia Medica, each of _____ Lectures.

(Date) _____ (Signature) _____

---

(9) I certify that _____ has attended two Courses in Practical Chemistry, including General and Pharmaceutical Chemistry, and the detection of the Adulteration of Drugs, each of _____

(Date) _____ (Signature) _____

(10) I certify that _____ has attended one Course of Practical Pharmacy of _____ months; and that he has acquired a practical knowledge of the preparation and compounding of Medicines.

(Date) _____ (Signature) _____

---

(11) I certify that _____ has been engaged in Dissection for two First Terms in Medicine, in the course of which he has dissected the whole human body twice.

(Date) _____ (Signature) _____

FORM AB.

UNIVERSITY OF BOMBAY.

Received from _____ Rs. 20, being the fee for permission to attend the ensuing First Examination in Medicine.

(Date) _____ (Signature) _____

Registrar.

FORM AC

UNIVERSITY OF BOMBAY.

I certify that the undersigned _____ satisfied the Examiners at the First Examination in Medicine, held

in the month of _____, and was placed in the _____ Division.

(Signature of the holder) _____

(Date) _____ (Signature) _____

EXAMINATION FOR THE DEGREE OF L.M. AND S.

FORM AD.

To

The REGISTRAR of the UNIVERSITY of BOMBAY.

SIR,

I request permission to present myself at the ensuing Examination for the Degree of Licentiate of Medicine and Surgery.

I am, &c.,

(Name with Surname) ..... _____
(Race and Religion) ..... _____
(College) ..... _____
(Date of passing the First Examination in Medicine) ..... _____
(Enter Post Office address)..... _____
(Date) _____

CERTIFICATES.

(1) I certify that _____, to the best of my knowledge and belief, is a person of good moral conduct; and that he has my permission to present himself at the ensuing Examination for the Degree of Licentiate of Medicine and Surgery.

(Signature of Head of School of Medicine) _____

(Date) _____

---

(2) I certify that _____ has attended two Courses of Lectures in Medicine, each of _____ Lectures.

(Date) _____ (Signature) _____

(3) I certify that_____has attended two Courses of Lectures in Surgery, each of_____ Lectures.

(Date)_____ (Signature)_____

---

(4) I certify that_____ has attended two Courses of Lectures on Diseases of the Eye, each of _____ Lectures.

(Date)_____ (Signature)_____

---

(5) I certify that_____ has attended two Courses of Lectures on Midwifery and Diseases of Women and Children, each of_____Lectures.

(Date) _____ (Signature)_____

---

(6) I certify that _____ has attended two Courses of Lectures in Medical Jurisprudence and Practical Toxicology, of_____ Lectures in the aggregate.

(Date)_____ (Signature)_____

---

(7) I certify that _____ has attended one Course in Pathology, of_____Lectures.

(Date)_____ (Signature)_____

---

(8) I certify that _____ has attended one Course in Hygiene, of _____ Lectures.

(Date)_____ (Signature)_____

(9) I certify that _____ has dissected the surgical regions, and performed operations on the dead subject during two Terms in Medicine.

(Date)_____ (Signature)_____

---

(10) I certify that _____ has attended a Lying-in Hospital for nine months, and has conducted _____ Midwifery cases.

(Date)_____ (Signature) _____

---

(11) I certify that _____ has attended at the Medical Practice of _____ Hospital for eighteen months, during nine of which he has officiated as Clinical Clerk, and that during that time he has attended _____ Lectures on Clinical Medicine.

(Date)_____ (Signature)_____

---

(12) I certify that _____ has attended at the Surgical Practice of _____ Hospital for eighteen months, during nine of which he has officiated as Surgical Dresser, and that during that time he had attended _____ Lectures on Clinical Surgery.

(Date) _____ (Signature)_____

---

(13) I certify that _____ has attended the Practice at _____ Ophthalmic Hospital for six months.

(Date) _____ (Signature)_____

FORM AE

UNIVERSITY OF BOMBAY.

Received from _____ Rs. 30, being the fee for permission to attend the ensuing Examination for the Degree of Licentiate of Medicine and Surgery.

(Signature)_____

(Date) _____ Registrar.

FORM AF.

UNIVERSITY OF BOMBAY.

I certify that the undersigned _____ satisfied the Examiners at the Examination for the Degree of Licentiate of Medicine and Surgery held in the month of _____ and was placed in the _____ Class.

(Signature of the holder) _____

(Signature) _____

Registrar.

(Date) _____

DOCTOR OF MEDICINE.

FORM AG.

To

The REGISTRAR of the UNIVERSITY of BOMBAY.

SIR,

I request permission to present myself at the ensuing Examination for the Degree of Doctor of Medicine.

I enclose testimonials signed by Doctors _____ and _____ and _____ of my having obtained the Degree of _____ in the University of _____, and the Degree of _____ in Medicine in the University of _____

I am, &c.,

(Name) ..... _____

(Race and Religion) ..... _____

(Enter Post Office address)..... _____

(Date) _____

I certify that _____ has attended the Medical and Surgical Practice of _____ Hospital during the years _____ and _____

(Signature) _____

(Enter Post Office address)..... _____

(Date) _____

FORM AH.

UNIVERSITY OF BOMBAY.

Received from_____ Rs. 100, being the fee for permission to attend the ensuing Examination for the Degree of Doctor of Medicine.

(Signature) _____
Registrar.

(Date)_____

FORM AI

UNIVERSITY OF BOMBAY.

I certify that the undersigned_ _____ _ satisfied the Examiners at the Examination for the Degree of Doctor of Medicine held in the month of _____

(Signature of the holder) _____

(Signature)_
Registrar.

(Date)_____

IV. CIVIL ENGINEERING.

FIRST EXAMINATION IN CIVIL ENGINEERING.

FORM AJ.

To

The REGISTRAR of the UNIVERSITY of BOMBAY.

SIR,

I request permission to present myself at the ensuing First Examination in Civil Engineering.

I am, &c.,

(Name) ....
(Race and Religion) ... .
(College) ....
(Date of Matriculation) .....
(Enter Post Office address) .....
(Date)

(Signature)

Certificate to be signed by the Head of the College or Institution in Arts at which the Candidate may have attended.

I certify that has attended since his Matriculation the number of days under specified at the , of which I am

(Signature)

(Date)

Number of Days.		Remarks.
188 -8	First Term _____	
	Second Term	
188 -8	First Term _____	
	Second Term	
188 -8	First Term _____	
	Second Term	

Certificates to be signed by the Head of School or College of Civil Engineering at which the Candidate may have studied

(1) I certify that _____ has attended since his Matriculation the number of days under specified at the _____, of which I am _____, _____

Number of Days.		Remarks.
188 -8	First Term _____	
	Second Term	
188 -8	First Term _____	
	Second Term	
188 -8	First Term _____	
	Second Term	

(2) I further certify that, to the best of my knowledge and belief, the said _____ _____

is a person of good conduct, and that he has my permission to present himself at the ensuing First Examination in Civil Engineering.

(Date) _____ (Signature) _____

FORM AK.

UNIVERSITY OF BOMBAY.

Received from _____ Rupees 20, being the fee for permission to attend the ensuing First Examination in Civil Engineering.

(Signature) _____

(Date) _____ Registrar.

LICENTIATE OF CIVIL ENGINEERING.

FORM AL.

To

The REGISTRAR of the UNIVERSITY of BOMBAY.

SIR,

I request permission to present myself at the ensuing Examination for the Degree of Licentiate of Civil Engineering.

I am, &c.,

(Name).. ..... _____

(Race and Religion) ..... _____

(College) ..... _____

(Date of passing the First Examination in Civil Engineering). ... . _____

(Signature) _____

(Enter Post Office address) ..... _____

(Date) _____

Certificates to be signed by the Head of School or College of Civil Engineering.

I certify that _____ has attended, subsequently to his passing the First Examination in Civil Engineering, the number of days under specified, at the _____, of which I am _____

(Date) _____ (Signature) _____

Number of Days.		Remarks.
188 -8	First Term Second Term	
188 -8	First Term Second Term	
188 -8	First Term Second Term	

(2) I further certify that, to the best of my knowledge and belief, the said _____ _____ is a person of good conduct, and that he has my permission to present himself at the ensuing Examination for the Degree of Licentiate of Civil Engineering at the University of Bombay.

(Signature) _____

(Date) _____

FORM AM.

UNIVERSITY OF BOMBAY.

Received from _____ Rupees 30, being the fee for permission to attend the ensuing Examination for the Degree of Licentiate of Civil Engineering.

(Signature) _____
Registrar.

(Date) _____

FORM AN.

UNIVERSITY OF BOMBAY.

I certify that the undersigned _____ _____ satisfied the Examiners at the Examination for the Degree of Licen-

tiate of Civil Engineering held in the month of _____ and was placed in the _____ Class.

(Signature of the holder) _____

(Signature) _____
Registrar.

(Date) _____

MASTER OF CIVIL ENGINEERING.

FORM AO.

To

The REGISTRAR of the UNIVERSITY of BOMBAY.

SIR,

I request permission to present myself at the ensuing Examination for the Degree of Master of Civil Engineering.

I am, &c.,

(Name) ..... _____
(Race and Religion) ..... _____
(College) ..... _____
(Date of Graduation in Arts) ..... _____
(Ditto ditto in Civil Engineering) ... _____
(Enter Post Office address)..... _____
(Date) _____

CERTIFICATES.

1. I certify that _____ has passed a period extending from _____ to _____ in actual practice on works under me.

(Signature of Engineer in charge of) ___
(Enter Post Office address) ..... _____
(Date) _____

2. I certify that _____ has passed a period extending from _____ to _____ in actual practice as a Civil Engineer, during which period he has been engaged on the following works.

(Signature of Engineer) _____
(Enter Post Office address) ..... _____
(Date) _____

FORM AP.

UNIVERSITY OF BOMBAY.

Received from_____ Rs. 50, being the fee for permission to attend the ensuing Examination for the Degree of Master of Civil Engineering.

(Signature) _____

Registrar.

(Date)_____

FORM AQ.

UNIVERSITY OF BOMBAY.

I certify that the undersigned _____ satisfied the Examiners at the Examination for the Degree of Master of Civil Engineering held in the month of _____

(Signature of the holder) _____

(Signature) _____

Registrar.

(Date)_____

THE MUNGULDASS NATHOOBHOY TRAVELLING FELLOWSHIP.

FORM AR.

To

The REGISTRAR of the UNIVERSITY of BOMBAY.

SIR,

I beg to present myself as a Candidate for the Munguldass Nathoobhoy Travelling Fellowship.

If I am elected, I pledge myself to accept the Fellowship and to comply with its conditions.

I enclose herewith testimonials of my fitness for election.

I am, &c.,

(Name and Degree) ..... _____

(Race) ..... _____

(College) ..... _____

(Date of Graduation) ..... _____

(Enter Post Office address) ..... _____

(Date)_____

THE BHUGWANDASS PURSHOTUMDASS SANSKRIT SCHOLARSHIP.

FORM AS.

To

The REGISTRAR of the UNIVERSITY of BOMBAY.

SIR,

I request permission to present myself at the ensuing Bhugwandass Purshotumdass Sanskrit Scholarship Examination.

I am, &c.,

(Name) .....

(Enter Post Office address) .....

(Date) ————

THE JAM SHRI VIBHAJI SCHOLARSHIP.

FORM AT.

The REGISTRAR of the UNIVERSITY of BOMBAY.

SIR

I beg to offer myself as a Candidate for the Jam Shri Vibhaji Scholarship.

I enclose a copy of my Matriculation Certificate (Form C), and also a Certificate that I was born in the village of ———— in the Province of Káthiáwár, signed by ———— (here enter the name of some person holding an official appointment in Káthiáwár).

I am, &c.,

(Enter Post Office address).....

Date)————

(Signature)

THE HEBBERT AND LATOUCHE SCHOLARSHIP
FORM AU.

To

The REGISTRAR of the UNIVERSITY of BOMBAY

SIR,

I beg to offer myself as a Candidate for the Hebbert and LaTouche Scholarship.

I enclose a copy of my Matriculation Certificate (Form C), and also a Certificate that I was born in *Soreth*, in Káthiáwár, signed by_____ (here enter the name of some person holding an official appointment in Káthiáwár)

I am, &c,

(Enter Post Office address) ... .————

(Date)————

(Signature)————

THE RAO SIR PRAGMALJI SCHOLARSHIP.
FORM AV.

To

The REGISTRAR of the UNIVERSITY of BOMBAY.

SIR,

I beg to offer myself as a Candidate for one of the Rao Sir Pragmalji Scholarships.

I enclose a Certificate signed by_____ that I (or my father, as the case may be,) was born in Cutch.

I am, &c,

(Enter Post Office address) ....————

(Date)————

(Signature)————

THE KAHANDASS MANCHARAM SCHOLARSHIP
FORM AW.

To

The REGISTRAR of the UNIVERSITY of BOMBAY.

SIR,

I beg to offer myself as a Candidate for the Kahandass Mancharam Scholarship.

I am, &c,

(Signature)————

(Enter Post Office address) .....————

(Date)————

VIII

Endowments.

I.

THE MUNGULDASS NATHOOBHOY TRAVELLING FELLOWSHIP.

Munguldass Nathoobhoy, Esq., Justice of the Peace, in a letter to Government, dated the 19th August 1862, offered the sum of Rs. 20,000 in 4 per cent. Government Securities, for the purpose of endowing a Travelling Fellowship for Hindu Graduates of the University of Bombay. This offer was accepted by a Convocation of the Senate on the 26th March 1863, and the following Regulations were passed for the awarding and tenure of the Fellowship :—

1. "THE MUNGULDASS NATHOOBHOY TRAVELLING FELLOWSHIP" shall be open to all Graduates of the University of Bombay being Hindus who shall not be of more than five years' standing from the date of their graduation. By the term Graduates is to be understood Masters and Bachelors of Arts, Bachelors of Science, Bachelors of Law, Doctors and Licentiates of Medicine, and Masters and Licentiates of Civil Engineering, and by the term date of graduation is to be understood the dates of the Candidates receiving the Degree of Bachelor of Arts or Bachelor of Science or Licentiate of Medicine or Licentiate of Civil Engineering.

2. Candidates for the Fellowship must forward an application to the Registrar under Form AR. one week before the day of election.

3. The election shall take place without Examination by the votes of the Syndicate, the Vice-Chancellor or Senior Fellow present having a casting vote.

4. Whenever there is a vacancy in the Fellowship, a convenient day for holding an election shall be appointed by the Syndicate, who shall give due notice of the same in the *Government Gazette*.

5. The Munguldass Nathoobhoy Fellowship shall be tenable by any one Fellow for a space of three years. The conditions of tenure are that the Fellow must leave Bombay and proceed to Europe within two months after his election; that he shall spend the whole of the three years subsequent to the date of his leaving India for Europe, out of India, and six months at least out of each year in Great Britain or Ireland; and that he shall report twice a year to the University Registrar as to the mode in which his time has been spent.

6. Any violation of the above conditions shall *ipso facto* cause the Fellowship to be vacated; and the Syndicate shall be empowered, for any just cause, to recall and deprive of his Fellowship any one who may have been elected.

7. The Munguldass Nathoobhoy Travelling Fellow shall receive through the University Registrar, in half-yearly instalments, payable in advance, from the day of his leaving India, the interest due upon the endowment, together with any accumulations that may have taken place during previous vacancies.

YEAR.	FELLOW.	COLLEGE.
1867 March	Jayakar, Atmárám Sadáshiv, L.M	Grant.
1868 Sept.	Thákur, Shripád Bábáji, B.A.	Elphinstone.
1871 Nov.	Daphtaré, Girdharlál Ratanlál, L.M., M.D	Grant.
1874 April.	Váslekar, Nánáji Náráyan, L.C.E.	Poona Civil Engineering (now College of Science).
1877 April.	Dhairyaván, Vásudev Krishnaráo, B.A., LL.B.	Elph. & Govt. Law School.
1881 June.	Prabhákar, Govindráo Bhán, L. M. & S.	Grant.

II.

THE MANOCKJEE LIMJEE GOLD MEDAL.

Limjee Manockjee and Cowasjee Manockjee, Esquires, in a letter to the Vice-Chancellor of the University, Sir Alexander Grant, Bart., dated the 27th May 1863, offered the sum of Rs. 5,000 in 4 per cent. Government Securities for the purpose of founding an annual Gold Medal, to bear the name of their father, the late Manockjee Limjee, Esquire, and to be awarded each year to the best Essay by a Uni-

versity student, on certain prescribed subjects. This offer was accepted by a Convocation of the Senate on the 3rd September 1863, and the following Regulations were passed for the awarding of the Medal :—

1 "THE MANOCKJEE LIMJEE GOLD MEDAL" shall be awarded annually for the best Essay by a University Student, in accordance with the subjoined conditions.

2. Competitors shall be Graduates in the University of Bombay who shall not be of more than five years' standing from the date of their graduation, on the day prescribed for the sending in of the Essays. By the term Graduates is to be understood Masters and Bachelors of Arts, Bachelors of Science, Bachelors of Laws, Doctors and Licentiates of Medicine, and Masters and Licentiates of Civil Engineering; and by the term date of graduation is to be understood the date of the Candidates' receiving the Degree of Bachelor of Arts, or Bachelor of Science, or Licentiate of Medicine, or Licentiate of Civil Engineering.

3. Competitive Essays shall be written in the English Language on the subject appointed for the current year, and shall be sent in to the University Registrar on or before the fourth Monday in September. Each Essay shall be designated by a motto instead of the writer's name, and shall be accompanied by a sealed cover, containing the name of the competitor, and a declaration that the Essay sent in by him is *bonâ fide* his own composition.

4. The subject of the Essay shall be in alternate years : (*a*) some question of Indian History or Antiquities ; (*b*) some question connected with the introduction into India of European Science and Art.

5. The subject for the competition is to be selected by the Syndicate, and notified not less than twelve months before the day for sending in the Essays.

6. The Judges shall be two in number, and shall be nominated annually by the Syndicate. Their decision shall be announced on the fourth Monday in November.

7. The Medal shall be presented to the successful Candidate at the Convocation for conferring Degrees next ensuing after the Judges' decision.

8. The successful Essay shall be printed at the expense of the University.

9. The Medal shall not be awarded to any Essay which, in the opinion of the Judges, would not, when printed, be credit-

able to the University. But if only one Essay be sent in, nothing shall hinder the Judges from awarding to it the Medal if it appears to them to come up to the proper standard.

10. Whenever a year passes without the Medal being awarded, the interest of the Endowment shall go towards the printing of Essays and other expenses connected with the Prize.

11. On all occasions of Academical costume, Medallists shall be entitled to wear their Medals.

YEAR.	SUBJECT.	PRIZEMAN.	COLLEGE
1865...	*The Rise and Spread of Buddhism in India.*	No Essay received.	..
1866 ..	*The Advantages and Means of Diffusing a Scientific Practice of Medicine in India.*	Medal not awarded.	
1867 ..	*The Unprinted Literature of the Marátháś.*	Ditto.	...
1868...	*The Comparison of different Styles of Architecture in respect of their suitability for Public and Domestic Buildings in India.*	Rastamji Mervánji Patel, M.A.	Elphinstone.
1869 ..	*The Connection between the Physical Geography of India and the History of the Country.*	Balvant Bhikáji Vakhárkar, B.A.	Deccan.
1870..	*The Social and Economic Effects of the Introduction of Railways into India.*	Dorábji Edalji Gimi, B.A.	Elphinstone.
1871...	*The Revenue Survey and Settlement of the Bombay Presidency as contrasted with the Land Systems of Lord Cornwallis and of the North-Western Provinces.*	Mánikji Nasarvánji Nánávati, B.A.	Elphinstone.
1872..	*The Economic Results and Probable Development of Botanical and Geological Researches in India.*	No Essay received.	
1873...	*The Demonology of Western India*	Medal not awarded.	...
1874 ..	*The Electric Telegraph as it affects India in its Social, Commercial, and Political Aspects.*	No Essay received.	...

YEAR.	SUBJECT.	PRIZEMAN.	COLLEGE
1875 .	*Gleanings of the History of Indian Medicine from its Ancient Literature.*	Medal not awarded.	
1876 .	*The Application of Modern Discoveries in Chemistry to Indian Farming.*	Ditto.	
1877..	*A short Abstract of the Political History of Gujarát and Mahárashtra from the first Century of the Christian Era to the Inroads of the Mahomedans as arrived at from an examination of Coins and Inscriptions.*	Dhondu Hari Agáse, B.A.	Elphinstone.
1878	*The Advantages and Means of Diffusing a Knowledge of Natural Science in India.*	Medal not awarded.	...
1879...	*The Unprinted Literature of the Maráthas.*	No Essay received.	
1880	*Meteorology in India in its Relations to Agriculture and the Mechanical Arts.*	Krishnáji Mádhavráo Joglekar, M.A.	Elphinstone.
1881...	*The Vernaculars peculiar to the Konkan from the Southern confines of the Goanese Territory to the Northern limits of the Thánd Zilla and Khándesh, investigated and established by me ns of Comparative Philology applied in aid of original Researches.*	No Essay received.	
1882 .	*The Advantages and Means of Diffusing a Knowledge of Natural Science in India.*		

III.
THE BHUGWANDASS PURSHOTUMDASS SANSKRIT SCHOLARSHIP.

Bhugwandass Purshotumdass, Esq., Justice of the Peace, in a letter to the address of the Registrar of the University, Dr. R. S. Sinclair, under date the 10th August 1863, offered the sum of Rs. 10,000 for the encouragement of the study of Sanskrit in the University of Bombay. This offer was accepted by a Convocation of the Senate on the 24th Sep-

tember 1863, and the following Regulations for the awarding of the proceeds of the endowment were passed :—

1. A Scholarship, to be called "THE BHUGWANDASS PURSHOTUMDASS SANSKRIT SCHOLARSHIP," of the value of Rupees four hundred, tenable for one year, and payable half-yearly, shall be awarded every year to the Candidate who passes the M. A. Examination with the highest marks for proficiency in Sanskrit, provided that the Scholarship shall not be awarded except to a Candidate whom the Examiners consider deserving of reward for his special knowledge and ability as a Sanskrit Scholar.

2. The name of the Candidate to whom the Scholarship may be awarded, shall be published with the list of the successful Candidates.

3. Whenever the Scholarship is not awarded, the money shall be reserved to be applied by the Syndicate in such manner as they shall think best fitted for furthering the object of the endowment.

YEAR.	SCHOLAR.	COLLEGE.
1866 Mar.	Bhágvat, Govind Rámchandra	Poona (now Deccan).
1867 ,,	Maráthe, Káshináth Bálkrishna ...	Do.
1868 ,,	Káthavaté, Abáji Vishnu... ...	Do.
1869 ,,	Telang, Káshináth Trimbak ...	Elphinstone.
1870 ,,	Athalé, Yashvant Vásudev ...	Do.
1870 Dec.	Athalé, Yashvant Vasudev ...	Do.
1871 ,,	Tulu, Ráoji Vásudev	Do.
1872 ,,	Pendse, Káshináth Balvant ...	Deccan.
1873 ,,	Bhidé, Shivrám Parshurám ...	Do.
1874 ,,	Gokhale, Rámchandra Vishnu .	Elphinstone.
1875 ,,	Bhat, Harirám Uttamrám ...	Do.
1876 ,,	Agáse, Ganesh Janárdan... ...	Deccan.
1877 ,,	Agáse, Dhondu Hari	Elphinstone.
1878 ,,	*Scholarship not awarded*	.....
1879 ,,	Apte, Váman Shivrám	Deccan.
1880 ,,	*Scholarship not awarded*	... ..
1881 ,,	Bhándárkar, Shridhar Rámkrishna	Elphinstone.

IV.

THE HOMEJEE CURSETJEE DADY PRIZE.

Homejee Cursetjee Dady Sett, Esq., Justice of the Peace, in a letter to the address of the Vice-Chancellor, Sir Alexander Grant, Bart., dated 10th September 1863, wrote as follows :—

"It has been suggested to me that the establishment of an Annual Prize or Medal for the best English Poem by a University Student would afford a useful stimulus to the cultivation of literature and to the development of good taste and refinement in this Presidency. Concurring in this view, I hereby beg to offer to the University of Bombay the sum of Rs. 5,000 in Government 4 per cent. Securities, and hope that the University may be pleased to accept this sum and apply it to the carrying out of the above object, under such Regulations as they may think best."

This offer was accepted by a Convocation of the Senate on the 21st December 1863, and Regulations passed for the awarding of the Prize, which were subsequently (22nd November 1879), at the instance of the donor, amended as follows :—

1. "THE HOMEJEE CURSETJEE DADY PRIZE," consisting of books to the value of Rs. 200, shall be awarded annually for the best English Essay on some literary or historical subject or every alternate year on some scientific subject in accordance with the subjoined conditions.

2. Competitors shall be Graduates or Undergraduates of the University of Bombay, of not more than six years' standing from the date of their Matriculation on the day prescribed for the sending in of the Essays.

3. The subject for the Essay shall be selected by the Syndicate and notified not less than twelve months before the day for sending in the Essay.

4. The Essays shall be sent in to the University Registrar on or before the fourth Monday in June. Each Essay shall be designated by a motto instead of the writer's name and shall be accompanied by a sealed cover containing the name of the competitor, his University standing, his Post Office address, and a declaration that the Essay sent in by him is *bonâ fide* his own composition.

5. The Judges shall be three in number, and shall be nominated annually by the Syndicate. Their decision shall be announced on the fourth Monday in August.

6. On the occasion when the prize is not awarded, the money shall be reserved to be applied by the Syndicate in such manner as they shall think best fitted for furthering the object of the endowment.

Year.	Subject.	Prizeman.
	Poems.	
1864...	*The Himálaya Mountains* ..	Vikáji, Frámji Rastamji.
1865 ..	*The Indian Seasons*	*Prize not awarded.*
1866 ..	*Alexandria*	*Ditto.*
1867...	*The Solar System*	Modi, Barzorji Edalji.
1868 .	*India Three Thousand Years Ago*	*Prize not awarded.*
1869...	*The Indus*	Kohiyár, Jehángiersháh Erachsháh.
1870...	*Vasco de Gama* .,.	Kohiyár, Jehángiersháh Erachsháh
1871...	*Suttee*	Aitken, Edward H.
1872 ..	*The Suez Canal*	*Prize not awarded.*
1873...	*Akbar*	*Ditto.*
1874...	*Shiváji*	*Ditto.*
1875...	*Athens*	*Ditto.*
1876	*The Visit of H. R. H. the Prince of Wales to India*	*Ditto.*
1877 .	*The Malabár Coast*	*Ditto.*
1878 .	*An Indian Pilgrimage*	*Ditto.*
1879 ..	*The Ganges Valley*	*Ditto.*
	Essays.	
1881...	*The Characteristics of English Literature of the Times of Queens Elizabeth, Anne and Victoria, Stated and Compared.*	*Prize not awarded.*
1882 ..	*The Elephantas*	

V.

THE JUGGONNATH SUNKERSETT SANSKRIT SCHOLARSHIPS.

Venayekrow Jugonnathjee Sunkersett, Esq., Justice of the Peace and Fellow of the University of Bombay, "wishing to perpetuate in the University the memory of the interest taken by his revered father during the last

42 years in the cause of education in the Presidency, and of his attachment to the sacred language of India," offered, in letters of the 16th September and 4th December 1865, to the address of the Registrar, Dr. R.S. Sinclair, for the acceptance of the Senate, six Sanskrit Scholarships, three of Rs. 25* each and three of Rs. 20* each per mensem; one of each kind to be awarded annually at the Matriculation Examination, and to be tenable for three years in a College or Institution in Arts recognized by the University. At the annual meeting of the Senate, held on the 18th December 1865, it was unanimously resolved—"That the liberal benefaction of Venayekrow Jugonnathjee Sunkersett, Esq., be accepted with the expression of the grateful remembrance by the University of the many and important services rendered by his honoured father to the cause of both elementary and advanced education in Western India, during his long and useful career as a citizen of Bombay." The Scholarships will be awarded in accordance with the following Regulations :—

1. Two Scholarships, to be called "THE JUGONNATH SUNKERSETT SANSKRIT SCHOLARSHIPS," one of Rs. 20 and one of Rs. 15 per mensem, shall be awarded every year to the two Candidates who shall have passed the Matriculation Examination with the highest marks for proficiency in the Sanskrit Language. The Scholarships will be tenable for two years at any of the Colleges or Institutions in Arts recognized by the University of Bombay, provided that the Scholar produce a certificate from the Head of the College or Institution that he is prosecuting his studies in Sanskrit.

2. The names of the successful Candidates will be published along with the list of the Candidates who may have passed the Matriculation Examination.

3. The Candidates elected must satisfy the Registrar, within six weeks from the date of election, that he has duly joined a recognized College or Institution.

4. In case of the Scholarships lapsing, through forfeiture or otherwise, during the course of the two years for which they are tenable, the money shall be reserved to be applied by he Syndicate in such a way as they shall think most expedient to the furtherance of the purposes of the endowment.

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* In consequence of the transfer of the securities from 5½ to 4½ per cent. Government stock, the value of these scholarships is reduced to Rs. 20 and 15 respectively.

Year.	Scholar.	School.
1866 ..	Athalé, Yashvant Vásudev ..	Ratnágiri High School.
	Shikharé, Govind Shripat ...	Dhulia High School.
1867 ..	Pendse, Káshináth Balvant ...	Poona High School, *formerly* Elphinstone High School.
	Godbole, Náráyan Bálkrishna.	Elphinstone High School
1868...	Chintámanipetkar, Pándurang Venkatesh.	Poona High School.
	Agáse, Náráyan Bhikáji ...	Ratnágiri High School.
1869...	Agáse, Ganesh Janárdan ..	Poona High School.
	Rájavade, Gopál Vishnu ...	Ratnágiri High School.
1870...	Limaye, Hari Váman... ...	Ditto.
	Oka, Váman Dáji	Ditto.
1871...	Bhat, Harirám Uttamrám ...	Surat High School.
	Oka, Krishnáji Govind ...	Poona High School.
1872...	Agáse, Dhondu Hari ...	Ratnágiri High School.
	Joshi, Lakshuman Janárdan. .	Free General Assembly's Institution, Bombay.
1873...	Apte, Váman Shivrám ...	Rájárám High School, Kolhápur.
	Gokhale, Krishnáji Vishnu ...	Ratnágiri High School.
1874...	Nátu, Trimbak Gangádhar ..	Surat High School.
	Gokhale, Gopál Rámchandra.	Rájárám High School, Kolhápur.
1875...	Bhándárkar, S'ridhar Rámkrishna.	Elphinstone High School.
	Kulkarni, Báláji Hari ...	Rájárám High School, Kolhápur.
1876...	Phadke, Rámchandra Dinkar.	Ratnágiri High School.
	Bhágvat, Báláji Abáji ...	Poona High School.
1877...	Godbole, Sadáshiv Mahádev .	Ratnágiri High School.
	Pitke, Gopal Rámchandra ...	Rájárám High School, Kolhápur.
1878 ..	Dámle, Shridhar Keshav ...	Ratnágiri High School.
	Dáte, Báláji Sadáshiv ...	Poona High School.
1879...	Vaidya, Lakshman Rámchandra	Ratnágiri High School.
	Chitnis, Malhár Khanderáo...	Poona High School.
1880...	Arte, Bháskar Rámchandra ..	New English School, Poona.
	Kirke, Krishnáji Hari... ...	Elphinstone High School.
1881...	Bodas, Lakshuman Chintáman.	New English School, Poona.
	Joshi, Narhar Bálkrishna ...	Robert Money Institution.

VI.

THE JAM SHRI VIBHAJI SCHOLARSHIP.

His Highness the Jam Shri Vibhaji of Nowánagar, being desirous of encouraging English education in Káthiáwár, offered in a letter to the Vice-Chancellor, Sir Alexander Grant, Bart., dated 25th February 1866, the sum of Rs. 4,500 for the founding of a Scholarship tenable by a Native of Káthiáwar for two years in an institution recognized by the University. At a meeting of the Senate, held on the 5th April 1866, it was resolved :—"That the handsome benefaction of His Highness the Jam Shri Vibhaji of Nowánagar be accepted with the best thanks of the University." The Scholarship will be awarded in accordance with the following Regulations :—

1. A Scholarship, to be entitled "THE JAM SHRI VIBHAJI SCHOLARSHIP," of the value of Rs. 15 per mensem, tenable for two years, shall be biennially, or whenever vacant, announced for competition.

2. The object of the Jam Shri Vibhaji Scholarship is to assist in maintaining Natives of Káthiáwár while studying in the University of Bombay.

3. Persons to be eligible for competition must be *boná fide* Natives of Káthiáwár who have passed the Matriculation Examination.

4. Should there be more Candidates than one, the Scholarship shall be awarded to that Candidate who shall appear from the University records to have obtained the highest marks for proficiency in English at the Matriculation Examination. Provided always that no Candidate who has once held the Scholarship is to be considered eligible for re-election.

5. The Scholarship shall be announced for competition in the first week of December. Applications of Candidates, under Form AT, must be sent in to the Registrar on or before the 31st December.

6. The Syndicate will thereupon proceed to adjudge the Scholarship on some day during the month of January.

7. The Candidate elected must satisfy the Registrar, within six weeks from the date of election, that he has duly joined a recognized College or Institution.

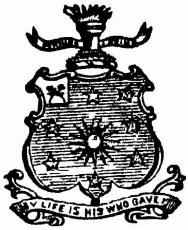
8. The stipend of the Scholarship shall be payable monthly on a bill drawn by the Head of some recognized College or Institution; which bill shall certify, under the signature of the head, that the Scholar is in regular attendance at the College or Institution, that his conduct is good, and his progress in University studies is satisfactory.

9. Should the Scholar discontinue his University studies, or be unfavourably reported of by the Head of his College or Institution, the Syndicate shall declare the Scholarship to be forfeited.

10. Any surplus which may arise from the vacancy of the Scholarship, during any year or part of a year, shall be added to next year's Scholarship, so as to increase the monthly stipend payable.

Year.	Scholar.	School.
1867...	Vohorá, Kalliánrái Lakshumishankar.	Surat High School.
1868...	Desái, Saváilal Govindrám ..	ElphinstoneHigh School.
1871...	Ved, Dulabji Dharamshi ...	Ditto.
1873.	Sett, Motichand Udhavji ...	Káthiáwár High School, Rájkot.
1875...	Ghogáválá, Adarji Pastamji...	Chandanvádi High School, Bombay.
1877...	Joshipará, Pránlál Káhándás.	Bahádurkhanji High School, Junágad.
1879 .	Mehtá, Anantrái Náthji ...	Bhávnagar High School.
1881...	Chaván, Odhavji Devji ...	Elphinstone High School

VII.



THE COWASJEE JEHANGHIER LATIN SCHOLARSHIP.

Cowasjee Jehanghier Readymoney, Esq., Justice of the Peace, being desirous of marking his interest in the Bombay University, offered, on the occasion of the Convocation for conferring Degrees which was held on the 14th of January 1868, in a letter to the Vice-Chancellor, Sir Alexander Grant, Bart., of the same date, the sum of Rs. 5,000 in 4 per cent. Government Paper, for the founding of a Latin Scholarship, to be awarded each year to the best Candidate in Latin at the Matriculation Examination. The offer was accepted by the Senate on the 31st of March 1868, with their best thanks, and the following Regulations were passed for the awarding of the Scholarship :—

1. A Scholarship, to be entitled "THE COWASJEE JEHANGHIER LATIN SCHOLARSHIP," of the value of Rs. 200 per annum, shall be awarded every year to that Candidate who shall have passed the Matriculation Examination, and who shall have obtained the highest marks for proficiency in Latin at such Examination, provided that the Scholar produce a certificate from the Head of his College or Institution that he is prosecuting his studies in Latin.

2. The stipend of the Scholarship shall be payable half-yearly on a bill drawn by the Head of some recognized College or Institution; which bill shall certify, under the signature of the Head, that the Scholar is in regular attendance at the College or Institution, that his conduct is good, and that his progress in University studies is satisfactory.

3. Should the Scholar discontinue his University studies, or be unfavourably reported of by the Head of his College or Institution, the Syndicate shall declare the Scholarship to be forfeited.

4. The Scholarship shall be awarded at the final meeting of the Matriculation Examiners, and the name of the Cowasjee Jehanghier Scholar for the ensuing year shall be published by the Examiners together with their list of Matriculated Students.

5. The Candidate elected must satisfy the Registrar, within six weeks from the date of election, that he has duly joined a recognized College or Institution.

6. In case of the Student who is elected declining to proceed to College, the stipend of the Scholarship for the ensuing year may be conferred on the Candidate who shall have obtained the second place in the Examination in Latin.

7. In case of the Scholarship lapsing through forfeiture, or otherwise, during the course of the year, any saving which may result may be added to next year's Scholarship so as to increase the half-yearly stipends payable; or may be used, at the discretion of the Syndicate, to create a second Scholarship for the ensuing year.

YEAR.	SCHOLAR.	SCHOOL.
1868	McDermott, Michael	St. Mary's Institution.
1869	DeMonte, Thomas Antonio	Ditto.
1870	Bryan, James	Ditto.
1871	DeSa, Luis 9	Ditto.
	Bhándárkar, Vásudev Gopál	Ditto.
1872	Hogan, Daniel	Ditto.
1873...	Pereira, Conrad	Ditto.
1874...	DeSouza, Lazarus Diogo .. ... o ...	Ditto
1875	O'Shanahan, Henry Frank	Ditto.
1876 ..	Mulligan, William George Tobias	Bishop'sHighSchool, Poona.
1877 .	Vakil, Rastamji Bamanshah	Elphinstone Eigh School
1878 .	Toole, John Harris	Bishop'sHigh School, Poona.
1879	Dias, Erasmo Xavier	St. Mary's Institution.
1880..	DeSilva, Manuel	Ditto.
1881.	DeMello, Ignatius	Ditto.

VIII.

THE KINLOCH FORBES GOLD MEDAL.

The Trustees to the Kinloch Forbes Memorial Fund, in a letter to the address of the Vice-Chancellor, the Rev. Dr. Wilson, dated the 19th December 1868, offered to the University, in behalf of themselves and other subscribers to the Fund, a sum of Rs. 5,000 in Government 5* per cent. Paper, for the purpose of awarding a yearly Gold Medal for proficiency in General Jurisprudence and the Roman Civil Law, to be called "THE KINLOCH FORBES GOLD MEDAL,"

* Now transferred to 4½ per cent. Government stock.

and for Law Books to accompany the Medal, should the fund allow. At the annual meeting of the Senate, held on the same date, the following Resolution was unanimously agreed to :—

"That the Senate accept with thanks this endowment, in honour of its late accomplished Vice-Chancellor, the Honourable Mr. Justice Kinloch Forbes."

The Medal will be awarded in accordance with the following Regulations :—

1. A Gold Medal, to be called "THE KINLOCH FORBES GOLD MEDAL," of the value of Rupees two hundred, with a Prize of Law Books of the value of Rupees fifty, will be awarded annually to the Candidate who obtains the highest number of marks in the subjects of Roman Civil Law and General Jurisprudence, including International Law, at the Examination for Honours in Law, provided always that in no case shall the Medal be awarded to a Candidate who is not placed by the Examiners in the first class of successful Candidates at such Examination.

2. The name of the Candidate to whom the Medal and Prize of Books are awarded shall be published with the list of successful Candidates at the Examination for Honours in Law.

3. Whenever the Medal and Books are not awarded, the money which would have been expended in purchasing them shall be applied by the Syndicate in such manner as they shall think best fitted for furthering the object and purposes of the endowment.

IX.

THE DAVID SASSOON HEBREW SCHOLARSHIP.

The Honourable A. D. Sassoon, C.S.I., being desirous of encouraging the study of the Hebrew Language, offered, in a letter, dated the 11th January 1869, to the address of the

Vice-Chancellor, the Rev. Dr. Wilson, the sum of Rs. 5,000 in Government 5* per cent. Paper for the foundation of a Scholarship (to be dedicated to the memory of his late father, David Sassoon, Esq.,) of Rs. 250 per annum, tenable for two years, in any Institution recognized by the University for Degrees in Arts.

The offer was accepted by the Senate at a meeting held on the 20th January 1869; and the Scholarship will be awarded in accordance with the following Regulations :—

1. A Scholarship of Rs. 250 per annum, to be denominated "THE DAVID SASSOON HEBREW SCHOLARSHIP," to be held for two years, shall, on the first occasion of its being bestowed, be awarded to the Candidate who shall pass the Matriculation Examination with the highest marks for proficiency in the Hebrew Language, or, failing such a Candidate, to the Undergraduate who shall pass the Previous Examination with the highest marks in the same language, provided that the Scholar produce a certificate from the Head of his College or Institution that he is prosecuting his studies in Hebrew.

2. The Scholarship shall be afterwards awarded every alternate year to the Candidate who shall, since the time of the last awarding of the Scholarship, have passed the Matriculation Examination with the highest marks for proficiency in the Hebrew Language, or, failing such a Candidate, to the Undergraduate who shall, since the time of the last awarding of the Scholarship, have passed the Previous Examination with the highest marks for proficiency in the same language.

3. The Scholarship shall be payable half-yearly, in equal proportions, to its allottee, on his producing a bill, countersigned by the Head of some College or Institution, recognized in Arts, accompanied by a certificate, from the same source, of regular attendance at that College or Institution, of good conduct, and of satisfactory progress in University studies.

4. Failing the production of such a certificate as that now indicated, the Syndicate may declare the Scholarship forfeited.

5. The Scholarship shall be awarded at the final meeting of the Matriculation (or Previous) Examination, and the name of the DAVID SASSOON SCHOLAR for the ensuing

* Now transferred to 4½ per cent. Government stock.

two years shall be published along with the list of the successful Candidates for Matriculation (or Previous) Examination.

6. The Candidate elected must satisfy the Registrar, within six weeks from the date of election, that he has duly joined a recognized College or Institution.

7. In case of the Matriculating Student who is elected declining to proceed to College, the Scholarship for the ensuing two years may be conferred on the Undergraduate who shall have obtained the second place in Hebrew in the Matriculation Examination, or, failing such a Candidate, to the passed Candidate who has obtained the highest marks in Hebrew in the Previous Examination and is willing to continue at College.

8. In case of the Scholarship not being adjudged, or lapsing before it has been held two years, the Scholarship may be awarded under the same rules at the next University Examinations; and any savings resulting from non-adjudication or lapse may be added to the next Scholarship's allotment, or used, at the discretion of the Syndicate, towards creating a second Scholarship.

YEAR	SCHOLAR.	SCHOOL.
1872..	David, Abraham Jacob.....	Scottish High School, Fort
1878..	Gavánkar, Rámrám Rághoba....	Fort High School.
1879	Khot, Krishnáji Venkáji	Ditto
1881	Reuben Ezra	Robert Money Institution.

X.

THE JAMES BERKLEY GOLD MEDAL.

R. M. Brereton, Esq., Chief Engineer, G. I. P. Railway, N.E.D., in a letter to the address of the Vice-Chancellor, the Rev. Dr. Wilson, dated 18th June 1869, offered in behalf of himself and the other admirers and friends of the late Mr. James J. Berkley, Chief Resident Engineer, G. I. P. Railway, the sum of Rs. 8,000 in Government 5* per cent. Promissory Notes, for the purpose of founding a "JAMES BERKLEY GOLD MEDAL" for Civil Engineering, of the value of Rs. 250, to be given annually, and a Prize of Books of a scientific nature to accompany the Medal. At a meeting of the Senate, held on the 13th August, the following Resolution was unanimously adopted:—

* Now transferred to 4½ per cent. Government stock.

"That this handsome endowment, in honour of Mr. James John Berkley, one of the original Fellows mentioned in the Act of Incorporation, be accepted with the best thanks of the Senate."

The medal and books will be awarded in accordance with the following Regulations :—

1. A Gold Medal, to be entitled "THE JAMES BERKLEY GOLD MEDAL," of the value of Rupees two hundred and fifty, with a Prize of Books on Civil and Mechanical Engineering of the value of Rupees one hundred and fifty, will be awarded annually to the Candidate who obtains the highest number of marks in the Examination for the Degree of L.C.E., provided that in no case shall the Medal be awarded if such Candidate be not specially recommended by the Examiners in Engineering and Engineering Drawing.

2. The name of the successful Candidate shall be published with the list of Candidates who have passed the Examination for the Degree of L.C.E.

3. Whenever the Medal and Books are not awarded, the money which would have been expended in purchasing them shall be applied by the Syndicate in such manner as they shall think best fitted for furthering the object and purposes of the endowment.

YEAR.	MEDALLIST.	COLLEGE.
1872..	Godbolé, Káshináth Rámchandra, B.A.....	Poona Civil Engineering.
1873..	Bomanji Sorábji	Ditto.
1874..	Chandnáni, Pritamdás Parsumal	Ditto.
1875..	Tarápurválá, Fardunji Kuvarji.....	Ditto.
1876	*Medal not awarded.*	
1877	*Ditto*	
1878..	Apte, Ganesh Krishna, B.A....	Ditto.
1879..	*Medal not awarded.*	
1880..	*Ditto.*	
1881..	*Ditto*	

XI.
THE ELLIS PRIZE.

The Honourable B. H. Ellis, Member of the Council of H. E. the Viceroy and Governor-General of India, offered, on the 26th August 1869, Promissory Notes of the value of Rs. 1,500, bearing interest at 4 per cent., for an annual prize of books of the value of Rs. 60, to be given to the Scholar who on Matriculation passes the best examination in any Oriental Language.

At a meeting of the Senate, held on the 13th October 1869, it was unanimously resolved:—

"That this endowment be accepted with the best thanks of the Senate as a token from the Honourable B. H. Ellis of his appreciation of the University, and regard for the people of Bombay."

The prize will be awarded in accordance with the following Regulations:—

1. A Prize, to be entitled "THE ELLIS PRIZE," consisting of books of the value of Rupees sixty, shall be awarded every year to the Candidate who shall have passed the Matriculation Examination with the highest marks for proficiency in an Oriental Language.

2. The prize shall be awarded in connection with such one or other of the following languages as the Syndicate from time to time may determine:—

1. Maráthi.	5. Sindhi.
2. Gujaráthi.	6. Arabic.
3. Canarese.	7. Persian.
4. Hindustani.	

3. The language for which the prize will be given each year shall be notified by the Syndicate not less than twelve months before each Matriculation Examination.

4. The books shall be presented to the successful Candidate by the Chancellor or Vice-Chancellor at the Convocation for Conferring Degrees.

YEAR.	LANGUAGE.	PRIZEMAN.	SCHOOL.
1869..	Maráthi	Kunte, Vishnu Keshav..	His Highness the Mahárájá of Indore Madressa
1870..	Gujaráthi	Kángá, Dinsháh Pestanji	Bombay Proprietary School
1871..	Canarese	Bevur, Rámchandra Hanumantráo.	Belgáum Sirdars' High School.
1872..	Sindhi	Mirzá, Kalichkhán Fraidunbeg.	Haidarábád High School.
1873..	Persian.....	Contractor, Behrámji Rastamji.	Poona High School.
1874..	Hindustani	DeGama, Samuel	Karáchi High School.
1875..	Arabic *or* Maráthi.	Kánitkar, Bálkrishna Hari (*Mardthi.*)	Private Tuition.
1876..	Gujaráthi	Káji, Chhaganlál Gulábdás.	Surat High School.
1877..	Canarese	Kuknur, Rághavendra Jayácharya	Dhárvád High School.
1878..	Sindhi	Jugtiáni, Kundanmal Mánikrái.	Haidarábád Mission School.
1879..	Maráthi.....	Patvardhan, Bálkrishna Náráyan.	Private Tuition, Poona.
1880..	Persian.	Munshi, Ghulám Ahmad.	Fort High School.
1881..	Hindustani	Mirzá, Najafkuli Fredunbeg.	Náráyan Jagannáth High School, Karáchi.
1882..	Sindhi		

XII.

THE HEBBERT AND LATOUCHE SCHOLARSHIP.

The Chiefs of Junágad and Nowánagar, in the Province of Káthiáwár, offered, through the Right Honourable the Governor in Council, on the 22nd October 1869, Government 5 per cent. Promissory Notes of the value of Rs. 5,000, for the foundation of a Scholarship of Rs. 20* per mensem in the University of Bombay, as a Memorial to Captains Hebbert and LaTouche, the officers who fell at the Tobar Hill in 1867 in fight with a band of outlawed Waghirs. At the annual meeting of the Senate, held on the 18th December 1869, it was unanimously resolved:—

"That the offer of Rs. 5,000 in Government 5 per cent. Promissory Notes, from the Chiefs of Junágad and Nowánagar, in Káthiáwár, for the foundation of a Scholarship in memory of Captains Hebbert and LaTouche, who fell nobly in the discharge of public duty at Tobar Hill in 1867, be accepted with the best thanks of the Senate."

The Scholarship will be awarded in accordance with the following Regulations:—

1. A Scholarship, to be entitled "THE HEBBERT AND LATOUCHE SCHOLARSHIP," of the value of Rupees eighteen per mensem, tenable for two years, shall be awarded biennially, or whenever vacant.

2. The object of the Scholarship is to assist Natives of Soreth, in Káthiáwár, desirous of prosecuting their studies in any one of the recognized Colleges or Institutions of the University of Bombay.

3. Persons to be eligible for competition must be *bonâ fide* Natives of Soreth who have passed the Matriculation Examination.

4. In the event of there being more than one Candidate for the Scholarship on the occasion of a vacancy, who shall fulfil the foregoing conditions, the Scholarship shall be awarded by the Syndicate to the Candidate who shall appear from the University records to have obtained the highest number of marks at the Matriculation Examination, provided always that no Candidate who has once held the Scholarship be eligible for re-election.

* In consequence of the transfer of the Securities from 5 to 4½ per cent. Government stock, the value is reduced to Rs. 18 a month.

5. The Scholarship shall be announced for competition in the first week of December. Applications of Candidates under Form AU must be sent in to the Registrar on or before the 31st December.

6. The Syndicate shall thereupon proceed to adjudge the Scholarship on some day during the month of January.

7. The Candidate elected must satisfy the Registrar, within six weeks from the date of election, that he has duly joined a recognized College or Institution.

8. The stipend of the Scholarship shall be payable monthly, on a bill drawn by the Head of some recognized College or Institution, who shall certify under his signature on such bill, that the Scholar is in regular attendance at the College or Institution, that his conduct is good, and that his progress in University studies is satisfactory.

9 Should the Scholar discontinue his University studies or be unfavourably reported on by the Head of the College or Institution, the Syndicate shall declare the Scholarship to be forfeited.

10. Any surplus which may arise from the vacancy of the Scholarship during any year, or part of a year, shall be added to next year's Scholarship so as to increase the monthly stipends payable.

YEAR	SCHOLAR	SCHOOL.
1871..	Sháh, Tribhuvandás Motichand	Rájkot High School.
1873..	Achárya, Devishankar Ravishankar	Káthiáwár High School.
1875..	Ráná, Rudarji Sundarji	Ditto.
1877	Buch, Bhupatrái Daválji.....	Ditto.
1879..	Joshipará, Pránlál Káhándás	Báhádurkhánji High School, Junágad.
1881..	Chháyá, Jetáshankar Jivanlál	Private Tuition, Junágad.

XIII.

THE WILSON PHILOLOGICAL LECTURESHIP.

The Honorary Secretary to the Committee of Management for the Subscribers to the Wilson Testimonial Fund offered, in a letter dated March 2nd, 1870, to the address of the Registrar, James Taylor, Esq., the sum of (Rs. 23,500) twenty-three thousand and five hundred Rupees in Govern-

ment five* per cent. Promissory Notes, for the endowment of a Philological Lectureship in honour of the Rev. John Wilson, D.D., F.R.S., Vice-Chancellor of the University, with the following conditions :—

1. That the Lectureship be called "THE WILSON PHILOLOGICAL LECTURESHIP," in connection with which, in consecutive years, a short series of Lectures should be delivered by a competent European or Native Scholar, annually selected for the purpose, on either of the following classes of languages and the literature in which they are embodied :—

I. Sanskrit and Prakrit languages derived from it.
II. Hebrew and the other Semitic languages.
III. Latin and Greek.
IV. English viewed in connection with Anglo-Saxon and its other sources.

2. That the interest of the Fund for this endowment be at the entire disposal of Dr. Wilson during his lifetime, and that the University undertake the duty of receiving the interest, and paying the same to Dr. Wilson, or to his order, at stated half-yearly periods, as the interest becomes due.

At a meeting of the Senate, held on the 2nd April 1870, the endowment, in honour of the late Vice-Chancellor of the University, the Rev. John Wilson, D.D., F.R.S., was accepted with the best thanks of the Senate."

Dr. Wilson died on the 1st December 1875, and on the 12th February 1876 the Senate passed the following Regulations for the Lectureship :—

1. Each Series of Lectures shall consist of not fewer than six Lectures.

2. The Lectures shall be delivered in Bombay in the First or cold-weather Term in each year.

3. In the month of January in each year the Syndicate shall publish a Notification in which the subject of the ensuing Series of Lectures shall be announced, and shall take such steps in each year as they may think best for obtaining a Lecturer.

* Now transferred to 4½ per cent. Government stock.

YEAR.	SUBJECT.	LECTURER.
1877..	Sanskrit and Prakrit Languages derived from it.	Ramkrishna Gopâl Bhándarkar, M A.
1878..	Latin and Greek	Peter Peterson, M.A.
1879..	Hebrew and the other Semitic Languages.	E. Rehatsek, M.C.E.
1880..	English viewed in connection with Anglo-Saxon and its other sources.	F. G. Selby, B.A.
1881..	Sanskrit and Prakrit Languages derived from it.	*No Lecturer.*
1882..	Latin and Greek	M. Macmillan, B.A.
1883..	Sanskrit and Prakrit Languages derived from it	

XIV.

THE ELLIS SCHOLARSHIP.

The President and Secretary to the Ellis Testimonial Committee, in a letter dated 19th April 1870, to the address of the Registrar, James Taylor, Esq., offered the sum of Rs. 7,206 for investment in 4 per cent. Government Promissory Notes for awarding annually, from the interest thereof, a monthly Scholarship of the value of Rs. 25, bearing the name of the Honourable B. H. Ellis, to the most successful Scholar in the English Language and Literature at the B A. Examination.

At a meeting of the Senate, held on the 16th June 1870, the following Resolution was unanimously adopted :—

"That this endowment in honour of the Honourable B. H. Ellis, Member of the Council of H. E. the Viceroy and Governor General of India, be accepted with the best thanks of the Senate."

The Scholarship will be awarded in accordance with the following Regulations :—

1. A Scholarship, to be entitled "THE ELLIS SCHOLARSHIP," of the value of Rupees twenty-five a month, shall be awarded annually at the Examination for the Degree of B.A. to the Candidate who passes the Examination with the highest marks in English.

2. The name of the successful Candidate shall be published with the list of Candidates who have passed the Examination for the Degree of B.A.

3. In case of the Scholarship lapsing during the course of the year for which it is tenable, any balance that may remain shall be added to the next year's Scholarship.

YEAR.	SCHOLAR.	COLLEGE.
1870..	Sayáni, Ibráhim Muhámmad	Elphinstone.
1871..	Kirloskar, Ganesh Rámchandra.....	Deccan.
1872..	Duncan, Thomas	St. Xavier's.
1873 .	Kángá, Dinsháh Pestanji	Elphinstone.
1874..	Modi, Jehángier Edalji	Ditto.
1875..	Chiplunkar, Lakshuman Krishna.....	Deccan, *formerly* Free General Assembly's.
1876..	Kángá, Fardunji Mánikji.....	St. Xavier's.
1877 .	Shahání, Dayárám Gidumal	Elphinstone.
1878..	Shanahan, Henry Frank	St. Xavier's.
1879..	Kángá, Sorábji Mánikji.....	Ditto.
1880..	Vaidya, Chintáman Vináyak	Elphinstone.
1881..	Narimán, Manikji Kharshedji	Ditto.

XV.

THE CHANCELLOR'S MEDAL.

At a Convocation for Conferring Degrees held on the 12th January 1869, His Excellency the Right Honourable Sir Seymour FitzGerald, G.C.S.I., D.C.L., Governor of Bombay, Chancellor of the University, founded a Gold Medal, to be called the "CHANCELLOR'S MEDAL," with a view to encourage the Graduates of the University of Bombay to aspire after the highest honours the University can bestow. At a meeting of the Senate, held on the 23rd March 1871, the following Regulations for awarding the Medal were passed :—

1. A Gold Medal, to be called "THE CHANCELLOR'S MEDAL," will be awarded annually in connection with the Examination for the Degree of Master of Arts.

2. The Syndicate will determine and notify each year, in December, the rotation in which the Medal shall be assigned in connection with each branch of study prescribed for the M.A. Examination.

3. The Medal shall be awarded to the Candidate who passes the Examination in the First Class, and obtains the highest number of marks in the branch of study notified for that year.

4. Provided that if no Candidate qualifies for the Medal in the specified subject of the year, the Syndicate shall be authorized to award it to the Candidate who, on a review of the Examination in the various subjects, passes in the First Class with the highest number of marks.

5. The name of the Candidate to whom the Medal is awarded, will be published with the list of successful Candidates.

6. The Medal will be presented at the Convocation for Conferring Degrees.

The Chancellor's Medal has been assigned in connection with the branches of study prescribed for the M.A. Examination in the following rotation:—

In 1880 to History and Philosophy
„ 1881 to Mathematics.
„ 1882 to Natural Sciences.
„ 1883 to Languages.

YEAR.	SUBJECT.	MEDALLIST.	COLLEGE
1874..	Languages .. .	Duncan, Thomas, B.A. .. .	St. Xavier's.
1876..	Mathematics and Natural Philosophy	Dastur, Fardunji Mancherji, B.A.	Elphinstone.
1877..	Natural Sciences ..	Náegáumválá, Kávasji Dádábhái, B.A.	Ditto.
1878..	Mathematics ..	Sanjáná, Kávasji Jamshedji, B A.	Deccan.
1879..	Languages	*Medal not awarded.*	
1880	History and Philosophy.	*Ditto.*	
1881..	Mathematics	Ditto.	

XVI.

THE ARNOULD SCHOLARSHIP.

The President and Secretary to the Arnould Testimonial Fund, in a letter dated 9th January 1871, to the address of the Registrar, James Taylor, Esq., offered to the University on behalf of the Native friends and admirers of Sir Joseph Arnould, Knight, a Judge of the High Court of Judicature, Bombay, a sum of Rupees 6,000 in Government 5 per cent. Securities for awarding annually, from the interest thereof, a Scholarship of Rs. 25* a month to the Candidate who passes the Examination for the Degree of LL.B. with the highest number of marks in the paper comprising the Hindu and Muhammadan Law.

At a meeting held on the 23rd March 1871, the endowment was accepted with the best thanks of the Senate, and

* In consequence of the transfer from 5 to 4 per cent. Government stock the value is reduced to Rs. 22 a month.

the following Regulations were passed for awarding the Scholarship:—

1. A Scholarship, to be called "THE ARNOULD SCHOLARSHIP," of the value of Rupees twenty-two a month, shall be awarded annually at the Examination for the Degree of LL.B. to the Candidate who passes the Examination with the highest number of marks in the paper on "Succession and Family Rights with special reference to Hindu and Muhammadan Law."

2. The name of the successful Candidate shall be published with the list of Candidates who have passed the Examination for the Degree of LL.B.

3. In case of the Scholarship lapsing during the course of the year for which it is tenable, any balance that may remain shall be added to the next year's Scholarship.

YEAR.	SCHOLAR.	COLLEGE.
1872..	Modi, Barzorji Edalji, M.A	Government Law School.
1873..	Deshmukh, Rámchandra Gopálráo, B.A	Ditto.
1874..	Kothére, Anandráo Krishnaráo, B.A. ..	Ditto.
1875..	Athalé, Yashvant Vásudev, M.A.	Ditto.
1876..	Dhairyaván, Vásudev Krishnaráo, B.A.	Ditto.
1877..	Inámdár, Venkatráo Rukhamángad, B A.	Ditto.
1878..	Joshi, Bháskar Shridhar, B.A	Ditto.
1879..	Ovalekar, Moreshvar Nárávan, B.A.	Ditto.
1880..	Chandávadkar, Nárávan Ganesh, B.A...	Ditto.
1881 .	Dave, Kevalrám Mávji	Ditto.

XVII.

THE DUKE OF EDINBURGH FELLOWSHIP.

The Chiefs and Sirdars of the Deccan and the Southern Mahrátta Country offered to the University, through Government, on the 24th July 1871, in commemoration of the visit of His Royal Highness the Duke of Edinburgh to the Presidency of Bombay, the sum of Rs. 10,000 for the establishment of a Fellowship of the value of the interest of the sum when invested in Government Securities, tenable for two years, and to be awarded every alternate year to the Undergraduate who passes with the highest marks in Honours at the B.A. Examination, on condition that he

continues his studies at one of the recognized Colleges, and presents himself at the M.A. Examination within such time as may be fixed by the University.

At a meeting of the Senate, held on the 29th September 1871, the offer of the Chiefs and Sirdars of the Deccan and the Southern Mahrátta Country was accepted with the best thanks of the Senate.

The Fellowship will be awarded in accordance with the following Regulations:—

1. A Fellowship, to be called the "DUKE OF EDINBURGH FELLOWSHIP," of the value of Rupees four hundred per annum and tenable for two years, shall be awarded every alternate year, or whenever vacant, to the Candidate who passes with the highest number of marks in the First Class at the B.A. Examination, on condition that he continues his studies at one of the Colleges or Institutions recognized by the University of Bombay, and presents himself at the M.A. Examination within the time of his Fellowship.

2. The Candidate elected must satisfy the Registrar, within six weeks from the date of election, that he has duly joined a recognized College or Institution.

3. The stipend of the Fellowship shall be paid half-yearly on a bill drawn by the Head of some recognized College or Institution, who shall certify under his signature on such bill that the Fellow is in regular attendance at the College or Institution, and that his conduct is good.

4. Should the Fellow discontinue his University studies, or be unfavourably reported on by the Head of his College or Institution, the Syndicate shall declare the Fellowship to be forfeited.

5. Any surplus which may arise from the vacancy of the Fellowship during any year, or part of a year, shall be applied by the Syndicate in such manner as they shall think best fitted for furthering the object and purposes of the endowment.

YEAR	FELLOW.	COLLEGE.
1872 .	Duncan, Thomas	St. Xavier's.
1874 ..	Dastur, Fardunji Mancherji.....	Elphinstone.
1876	Agáse, Dhondu Hari	Ditto.
1878 ..	Shanahan, Henry Frank	St. Xavier's.
1880 ..	Vaidya, Chintáman Ganesh	Elphinstone.

XVIII.

THE BAI MANECKBAI BYRAMJEE JEEJEEBHOY PRIZE.

The Honourable Byramjee Jeejeebhoy, in a letter dated 10th August 1871, to the address of the Registrar, offered to the University "a 4 per cent. Government Promissory Note of Rs. 2,000, that the interest thereof may be devoted to the giving of a Prize or Prizes annually to the successful Student or Students in any branch of learning the Senate may think proper, in the name of Bai Maneckbai Byramjee Jeejeebhoy."

At a meeting of the Senate, held on the 29th September 1871, this offer was accepted with the thanks of the Senate.

The Prize will be awarded in accordance with the following Regulations :—

1. A Prize, to be entitled "THE BAI MANECKBAI BYRAMJEE JEEJEEBHOY PRIZE," consisting of books of the value of Rupees eighty, shall be awarded every year to the Candidate who passes the Matriculation Examination with the highest marks for proficiency in "General Knowledge."

2. The name of the successful Candidate will be published with the list of the Candidates who may pass the Matriculation Examination.

YEAR	PRIZEMAN.	SCHOOL.
1872	Mullá, Faizullábhái Lukmánji	Surat High School.
1873..	Pereira, Conrad .....C.....	St Mary's Institution.
1874..	Ketkar, Venkatésh Bápuji	Belgaum Sirdars' High School.
1875..	Sheik, Yákub Ismáel.....	Haidarábád High School.
1876..	Merchant, Pestanji Dádábhái	Parsi Boarding School, Bandora.
1877..	Vaidya, Chintáman Vináyak	Elphinstone High School.
1878 .	Joshi, Moro Vishvanáth	Amráoti High School.
1879..	Gokhale, Mahádev Vishnu.....	Elphinstone High School.
1880..	Sutton, Alexander Arthur	Scottish High School, Byculla.
1881	Millard, Alfred	Ditto.

XIX.

THE RAO SIR PRAGMALJI SCHOLARSHIPS.

The Kutchi inhabitants of Bombay, desiring to commemorate the visit of His Highness the Maharaja Sir Pragmalji Bahadur, G.C.S I., Rao of Kutch, to the city of Bombay, when he came to meet His Royal Highness the Duke of Edinburgh in 1870, raised a sum of Rs. 20,000, to which

His Highness added a sum of Rs. 25,000, making an aggregate amount of Rs. 45,000. Of this sum, Rs. 30,000, in Government 4 per cent. paper, were offered to the University, through the Government of Bombay, on the 2nd January 1872, to found Scholarships, to be called "THE RAO SIR PRAGMALJI SCHOLARSHIPS," and to be awarded to Kutchi Students to enable them to prosecute University studies, or, failing such Students, to other Native Students who may be qualified for the same.

At a meeting of the Senate, held on the 9th March 1872, the offer was accepted with the best thanks of the Senate.

The Scholarships will be awarded in accordance with the following Regulations :—

1. Two Scholarships, to be called "THE RAO SIR PRAGMALJI SCHOLARSHIPS," one of Rupees 20 and one of Rupees 15 per mensem, shall be awarded every year to the two Kutchi* Candidates who shall have passed the Matriculation Examination with the highest number of marks.

2. The Scholarships will be tenable for three years at any of the Colleges or Institutions recognized by the University of Bombay.

3. Kutchi Candidates must forward their applications to the Registrar (*vide* Form AV) with their applications for permission to attend the Matriculation Examination of the same year.

4. The Syndicate shall adjudge the Scholarships soon after the result of the Matriculation Examination shall be declared by the Examiners.

5. In the event of there being no Kutchi Candidates entitled to receive the Scholarships, the Syndicate shall award them to the two Native Candidates who get the highest number of marks at the Matriculation Examination, and who may not have received any other University Scholarship of equal or higher value.

6. The Candidate elected must satisfy the Registrar, within six weeks from the date of election, that he has duly joined a recognized College or Institution.

7. In case of the Scholarships lapsing through forfeiture or otherwise, during the course of the three years for which

* By Kutchi is intended youths born in Kutch, or youths whose fathers were born in Kutch.

they are tenable, the money shall be reserved to be applied by the Syndicate in such manner as they shall think best fitted for furthering the object and purposes of the endowment.

YEAR.	SCHOLAR.	SCHOOL.
1872	Khimjiáni, Fázal Manji	Elphinstone High School.
	Mullá, Faizallábhái Lukmánji	Surat High School.
1873	Nánjiáni, Karimálli Rahim	Elphinstone High School.
	Gorátelá, Visanji Hansráj	Ditto.
1874	Davé, Vithalji Keshavji	Alfred High School, Kutch.
	Patel, Hasam Virji	General Assembly's Institution.
1875	Thakar, Hirji Bhagvánji	Alfred High School, Kutch.
	Parulékar, Dattátraya Vishvanáth	Ratnágiri High School.
1876	Soman, Dinkar Bháskar	Ditto.
	Ahmadi, Faiz Muhámmad Fathe Ali	Elphinstone High School.
1877	Rukhá, Visanji Kallianji	Bombay Proprietary School.
	Budbhati, Keshavji Shámji	Nárayan Jagannáth High School, Karáchi.
1878	Rukha, Rámdás Ladhá	Bombay Proprietary School.
	Sapat, Lakshmidás Ravji	Ditto.
1879	Anantáni, Pránshankar Jatáshankar.	Alfred High School, Kutch.
	Thakar, Kallánji Ratansi	Ditto.
1880	Karamálli Dost Muhámmad	Fort High School.
	Saukhariá, Dámodar Ishvar	Free General Assembly's Institution, Bombay.
1881	Vyás, Rághavji Jayakrishna	Robert Money Institution.
	Parmánand, Jagannáth Náráyan	Elphinstone High School.

XX.

THE SIR JASVANTSINGJI SCHOLARSHIPS.

His Highness Sir Jasvantsingji, K.C.S.I., the late Thakur of Bhawnagar, having set apart a sum of money to commemorate the visit of His Royal Highness the Duke of Edinburgh to Bombay in 1870, a sum of Rs. 25,000 was invested in Government 4 per cent. paper, which the Joint Administrators of the Bhawnagar State offered to the University, in July 1873, to found six Scholarships, to be called "THE SIR JASVANTSINGJI SCHOLARSHIPS," two to be awarded every year to the Candidates who pass the Matriculation Examination after having studied for two years continuously before Matriculation in the Bhawnagar Alfred High School.

At a meeting of the Senate, held on the 11th November 1873, this offer was accepted by the Senate with their best thanks.

The Scholarships will be awarded in accordance with the following Regulations :—

1. Two Scholarships, to be called "THE SIR JASVANTSINGJI SCHOLARSHIPS," one of Rupees fifteen and one of Rupees

twelve per mensem, shall be awarded every year to the two Candidates who shall have passed the Matriculation Examination with the highest number of marks after having studied for two years continuously before Matriculation in the Bhawnagar Alfred High School.

2. The Scholarships shall be tenable for three years at any College recognized by the University of Bombay.

3. The Candidate elected must satisfy the Registrar, within six weeks from the date of election, that he has duly joined a recognized College or Institution.

4. The stipend of the Scholarship shall be payable monthly on a bill drawn by the Head of the College, who shall certify, under his signature on such bill, that the Scholar is in regular attendance (except in case of sickness) at the College, that his conduct is good, and that his progress in University studies is satisfactory.

5. In the event of a Scholar failing to pass the University Examinations in the course in which he is studying at the earliest opportunity in each case, his Scholarship shall be forfeited. Provided always that it shall be in the option of the Syndicate to continue his Scholarship to such Scholar if they think fit.

6. In the event of there being no Candidates entitled to receive the Scholarships, or in case of their lapsing during the course of the three years for which they are tenable, the money shall be reserved to be applied by the Syndicate in such manner as they shall think best fitted for furthering the object of the endowment.

YEAR.	SCHOLAR.	SCHOOL.
1874	Desái, Sákarlál Chhotamlál	Bhawnagar High School.
	Oza, Dulérái Mahipatrái	Ditto.
1875	Mehtá, Balvantrái Harjivandás	Ditto.
	Mehtá, Partábrái Govindrái	Ditto.
1876	Oza, Kalliánrái Mahipatrái	Ditto.
	Mehtá, Sámaldás Chhaganlál.....	Ditto.
1877	Mehtá, Vámanrám Kapilrám	Ditto.
	Mehtá, Mahipatrám Govindrám	Ditto.
1878	Oza, Mánshankar Parmánand..	Ditto.
1879	Thakar, Chhaganlál Lakshmidás	Ditto.
	Párekh, Bechardás Chhaganlál	Ditto.
1880	Gandhi, Virchand Rághavji	Ditto.
	Joshi, Khushaldás Karsandás.....	Ditto.
1881	Mehtá, Motichand Javer	Ditto.
	Trivedi, Dulabji Narsi	Ditto

XXI.

THE KARSANDAS MULJI PRIZE.

Sorabji Shapurji Bengali, Esq., Honorary Secretary to the Karsandas Mulji Memorial Fund, in a letter dated the 11th November 1873, to the address of the Registrar, offered to the University the sum of Rs. 3,000 in Government 4 per cent. paper for the purpose of founding an annual prize, to be called "THE KARSANDAS MULJI PRIZE," of Rs. 100, to be awarded to the best Essay in English on any moral or social subject selected by the Syndicate, by any Graduate or Undergraduate of the University.

At a meeting of the Senate, held on the 20th December 1873, this endowment was accepted with the best thanks of the Senate.

The Prize will be awarded in accordance with the following Regulations :—

1. The Karsandas Mulji Prize, consisting of books of the value of Rupees one hundred, shall be awarded annually for the best English Essay on some moral or social subject in accordance with the subjoined conditions.

2. Competitors shall be Graduates or Undergraduates of the University of Bombay of not more than six years' standing from the date of their Matriculation on the day prescribed for the sending in of the Essays.

3. The subject for the Essay shall be selected by the Syndicate, and notified not less than twelve months before the day for sending in the Essay.

4. The Essays shall be sent in to the University Registrar on or before the fourth Monday in July. Each Essay shall be designated by a motto instead of the writer's name, and shall be accompanied by a sealed cover containing the name of the competitor, his University standing, his post office address, and a declaration that the Essay sent in by him is *bonâ fide* his own composition.

5. The Judges shall be three in number, and shall be nominated annually by the Syndicate. Their decision shall be announced on the fourth Monday in September.

6. The prize shall not be awarded to any Essay which, in the opinion of the Judges, would not, when printed, be creditable to the University.

7. On the occasions when the prize is not awarded, the money shall be reserved to be applied by the Syndicate in such manner as they shall think best fitted for furthering the object of the endowment.

YEAR.	SUBJECT.	PRIZEMAN.	COLLEGE.
1875	The Connection of Social Morality with National Prosperity.	*No Essay received.*	
1876	The Effect of Early Marriages on the Educational Progress of the Natives of this Country	Tripáthi, Govardhan, Mádhavarám, B.A.	Elphinstone.
1877	The Influence of Asceticism on the Social Morality of the Hindus.	Bhándárkar, Vásudev Gopál, B.A	Ditto.
1878	The Use and Abuse of Religious and Educational Endowments.	Mudholkar, Rangnáth Narsinh, B.A.	Ditto
1879	The Effects (Present and Future) of English Education on the Social Condition of the Hindus	*No Essay received.*	
1880	Caste as it prevails in the various Provinces of India. The Influence of such an institution, good or evil, on the progress of a Nation; if evil, in what way may Indian Society be freed from it.	*No Essay received.*	
1881	The Effects (Present and Future) of English Education on the Mental and Moral Condition of the Hindus.		
1882	The Connection of Social Morality with National Prosperity.		

XXII.

THE DOSSABHOY HORMUSJEE CAMA PRIZE.

Kharshedji Rastamji Cama, Esq., in a letter dated the 28th November 1874, to the address of the officiating Registrar, offered to the University, on behalf of the heirs of the late Dossabhoy Hormusjee Cama, the sum of Rupees (5,000) five thousand in 4 per cent. Government Promissory Notes for the purpose of founding an annual prize under certain conditions mentioned therein.

At a meeting of the Senate, held on the 19th December 1874, the endowment was accepted with the best thanks of the Senate.

The Prize will be awarded in accordance with the following Regulations:—

1. A Prize, to be called "THE DOSSABHOY HORMUSJEE CAMA PRIZE," consisting of books of the value of Rupees (200) two hundred, shall be awarded annually for the best English Essay on a medical subject.

2. Competitors shall be Licentiates of Medicine of the University of Bombay, or Graduates of Grant Medical College.

3. The subject for the Essay shall be selected by the Syndicate, and notified not less than twelve months before the day for sending in the Essay.

4. The Essays shall be sent in to the University Registrar on or before the fourth Monday in July. Each Essay shall be designated by a motto instead of the writer's name, and shall be accompanied by a sealed cover containing the name of the competitor, his University or College standing, his post office address, and a declaration that the Essay sent in by him is *bonâ fide* his own composition.

5. The Judges shall be three in number, and shall be nominated annually by the Syndicate. Their decision shall be announced on the Fourth Monday in September.

6. The prize shall not be awarded to any Essay which, in the opinion of the Judges, would not, when printed, be creditable to the University.

7. On the occasions when the prize is not awarded, the money shall be reserved to be applied by the Syndicate in such manner as they shall think best fitted for furthering the object of the endowment.

YEAR.	SUBJECT.	PRIZEMAN.	COLLEGE
1876	Causes of the more dangerous Forms of Malarial Fevers in the Town and Island of Bombay, with Suggestions for their Prevention	*Prize not awarded.*	
1877	Telluric and Climatic Influences on the Production and Modification of Diseases as witnessed in Bombay.	*No Essay received.*	
1878	The Origin and Spread of Zymotic Diseases in India, and Suggestions for their Eradication.	*No Essay received.*	
1879	The Effects of "Famine" upon the Public Health; Remarks to be specially applicable to India	Mehtá, Kávasji Navroji, G. G. M. C.	Grant Medical College.
1880	On recently recognized Forms of Diseases in India: their Methods of Introduction, and Suggestions for their Limitation or Eradication.	Ditto.	Ditto
1881	Telluric and Climatic Influences on the Production and Modification of Diseases as witnessed in Bombay.	*Prize not awarded.*	
1882	On the Prevalence of Phthisis in the City of Bombay, the extent to which this is preventible, and the measures which should be adopted to ensure that result.		

XXIII.

THE HUGHLINGS PRIZE.

In April 1875, the Honorary Secretary to the Hughlings Testimonial Fund offered to the University, by the direction of the Committee of that Fund, the sum of Rs. 2,500 in 4 per cent. Government Promissory Notes for the purpose of founding an annual prize in memory of the late Professor Hughlings.

At a meeting of the Senate, held on the 18th September 1875, the offer was accepted with the best thanks of the Senate.

The Prize will be awarded in accordance with the following Regulations :—

1. A Prize, to be called "THE HUGHLINGS PRIZE," consisting of books of the value of Rupees one hundred, shall be awarded every year to the Candidate who passes the Previous Examination with the highest marks for proficiency in English.

2. The name of the successful Candidate will be published along with the list of the Candidates who may pass the Previous Examination.

YEAR.	PRIZEMAN.	COLLEGE.
1876 ..	Shâháni, Dayárám Gidumal	Elphinstone
1877 ..	O'Shanahan, Henry Frank	St. Xavier's.
1878 ..	Gomes, Lúís Paul C?.....	Do.
1879 ..	Pereira, Frank Charles	Do.
1880 (April.)	Kelkar, Vásudev Bálkrishna	Elphinstone.
1880 (Dec.)	Ajrekar, Keshav Ganesh	Do.
1881 ..	Sabnis, Rámchandra Ghanashám	St. Xavier's.

XXIV.

THE JAMES TAYLOR PRIZE.

In December 1875 the Honorary Secretaries to the Taylor Memorial Fund offered to the University, by direction of the Committee of that Fund, the sum of Rupees 2,500 in 4 per cent. Government Promissory Notes, for the purpose of founding an annual prize in memory of the late Mr. James Taylor, for six years Registrar of this University.

At a meeting of the Senate, held on the 18th December 1875, this offer was accepted with the best thanks of the Senate.

The Prize will be awarded in accordance with the following Regulations:—

1. A Prize, to be called "THE JAMES TAYLOR PRIZE", consisting of books of the value of Rupees one hundred, shall be awarded annually in connection with the B.A. Examination, on the following conditions:—

2. The Prize shall be awarded to the Candidate who passes the Examination in the First or Second Class with the highest marks in Political Economy and History, provided that no Candidate obtains the prize who has not satisfied the Examiners of his due proficiency in these subjects.

3. The name of the Candidate to whom the prize may be awarded shall be published with the list of successful Candidates.

4. Whenever the Prize is not awarded, the money will be reserved to be applied by the Syndicate in such manner as they shall think best fitted for furthering the object of the endowment.

YEAR.	PRIZEMAN.	COLLEGE.
1876..	Chandávadkar, Náráyan-Ganesh.....	Elphinstone.
1877	Sháháni, Dayáràm Gidumal.....	Ditto.
1878..	Modi, Jijibhái Edalji	Ditto.
1879..	Dvivedi, Manilál Nabhubhái.....	Ditto.
1880 .	Pandiá, Chhaganlál Harilál	Ditto.
1881	Narimán, Mánikji Kharshedji	Ditto.

XXV.

THE BHAU DAJI PRIZE.

In March 1876 the Honorary Secretaries to the Bhau Daji Memorial Fund offered to the University, by direction of the Committee of that Fund, the sum of Rupees 5,000 in 4 per cent. Government Promissory Notes, for the purpose of founding an annual prize in memory of the late Dr. Bhau Daji, G.G.M.C., Hon. M.R.A.S., one of the Fellows mentioned in the Act of Incorporation, and for many years Syndic in the Faculty of Arts.

At a meeting of the Senate, held on the 31st March 1876, this offer was accepted with the best thanks of the Senate.

The Prize will be awarded in accordance with the following Regulations:—

1. A Prize, to be called "THE BHAU DAJI PRIZE," consisting of books of the value of Rupees two hundred, shall be awarded every year to the Candidate who passes the B.A. Examination with the highest marks for proficiency in Sanskrit: provided that the prize shall not be awarded, except to a Candidate whom the Examiners consider deserving of reward for his special knowledge and ability as a Sanskrit Scholar.

2. The name of the Candidate to whom the Prize may be awarded, shall be published with the list of successful Candidates.

3. Whenever the Prize is not awarded, the money will be reserved to be applied by the Syndicate in such manner as they shall think best fitted for furthering the object of the endowment.

YEAR.	PRIZEMAN.	COLLEGE.
1876..	Pávgi, Ráoji Bhavánráo	Elphinstone.
1877..	Apté, Váman Shivrám	Deccan.
1878..	Nátu, Káshináth Gangádhar, B.A.	Ditto.
1879..	Bhándárkar, S'ridhar Rámkrishna	Elphinstone.
1880..	Divátiá, Narsingráo Bholánáth	Ditto.
1881..	Deshmukh, Ganesh Krishna	Ditto.

XXVI.

THE VENAYEKRAO JUGONNATHJI SUNKERSETT PRIZE.

Nanabhoy Byramjee Jeejeebhoy, Esq., Honorary Secretary to the Venayekrao Jugonnathji Sunkersett Memorial Fund, in a letter dated 1st April 1876, to the address of the Vice-Chancellor, offered to the University the sum of

Rs. 4,500 in Government 4 per cent. paper for the purpose of founding an annual prize of books, of the value of Rs. 180, to be called "THE VENAYEKRAO JUGONNATHJI SUNKERSETT PRIZE."

At a meeting of the Senate, held on the 6th October 1876, the offer was accepted with the best thanks of the Senate.

The Prize will be awarded in accordance with the following Regulations :—

1. A Prize, to be called "THE VENAYEKRAO JUGONNATHJI SUNKERSETT PRIZE," consisting of books of the value of Rupees one hundred and eighty, shall be awarded every year to the Candidate who passes the Previous Examination with the highest marks for proficiency in Sanskrit.

2. The name of the Candidate to whom the Prize may be awarded shall be published with the list of successful Candidates.

YEAR.	PRIZEMAN.	COLLEGE.
1877 ..	Nátu, Trimbak Gangádhar	Elphinstone.
1878 ..	Divátiá, Narsingráo Bholánáth	Ditto.
1879 ..	Vaidya, Chintáman Vináyak.....	Ditto.
1880 .. (April.)	Deshmukh, Ganesh Krishna.....	Ditto.
1880 .. (Dec.)	Banhátti, Náráyan Dáso.....	Ditto.
1881 ..	Kirkire, Krishnáji Hari	Ditto.

XXVII.

THE MERWANJEE FRAMJEE PANDAY SCHOLARSHIP.

Nusserwanjee Maneckjee Petit, Esq., President of the Oriental Spinning and Weaving Company, Limited, in a letter dated the 14th August 1876 to the address of the Vice-Chancellor, offered to the University, on behalf of the Company, the sum of Rs. 6,000 in Government 4 per cent. paper for the purpose of founding an annual Scholarship of the value of Rs. 20 a month, to be called "THE MERWANJEE FRAMJEE PANDAY SCHOLARSHIP," in memory of the late Mr. Merwanjee Framjee Panday, to be awarded at the Examination for the Degree of L.C.E. to the Candidate who passes with the highest number of marks in Mechanical Engineering.

At a meeting of the Senate, held on the 6th October 1876, this offer was accepted with the best thanks of the Senate.

The Scholarship will be awarded in accordance with the following Regulations :—

1. A Scholarship, to be called "THE MERWANJEE FRAMJEE PANDAY SCHOLARSHIP," of the value of Rupees twenty a month, shall be awarded annually at the Examination for the Degree of L.C.E. to the Candidate who passes with the highest number of marks in "Mechanical Engineering."

2. The name of the Candidate to whom the Scholarship may be awarded shall be published with the list of successful Candidates.

3. Whenever the Scholarship is not awarded, the money will be reserved to be applied by the Syndicate in such manner as they shall think best fitted for furthering the object of the endowment.

YEAR.	SCHOLAR.	COLLEGE.
1876	Bhedvár, Kaikhosru Pestanji	Poona Civil Engineering
1877	Ribeiro, C. Antonio	Ditto.
1878	Mujumdár, Máneklál Narbherám	Ditto.
1879	Dudley, C. W.	Ditto.
1880	Bharuchá, Mánikji Sheriárji	Ditto.
1881 ..	Surveyor, Mánikji Ratanji	Ditto

XXVIII.

THE KAHANDAS MUNCHARAM SCHOLARSHIP.

In August 1876 the widow of the late Kahandas Muncharam, Esq., a Justice of the Peace, Fellow of the University of Bombay, and Executive Engineer, Presidency Division, offered to the University the sum of Rs. 6,000 for investment in Government 4 per cent. paper, in accordance with the Will made by him, for the purpose of founding an annual Scholarship of the value of Rs. 20 a month, to be awarded at the Matriculation Examination to the Gujaráthi Hindu Candidate who passes with the highest number of marks, on condition that he prosecutes his studies, during the time that he holds the Scholarship, in an Engineering College recognized by the University.

At a meeting of the Senate, held on the 6th October 1876, this offer was accepted with the best thanks of the Senate.

The Scholarship will be awarded in accordance with the following Regulations :—

1. A Scholarship, to be called "THE KAHANDAS MUNCHARAM SCHOLARSHIP," of the value of Rupees twenty a month, shall be awarded annually at the Matriculation Examination to the Gujaráthi Hindu Candidate who passes with the highest number of marks, on condition that he prosecutes his studies, during the time that he holds the Scholarship, in an Engineering College recognized by the University of Bombay.

2. Candidates must forward their applications to the Registrar (*vide* Form AW.) with their applications for permission to attend the Matriculation Examination of the same year.

3. The Candidate elected must satisfy the Registrar, within six weeks from the date of election, that he has duly joined a recognized College or Institution.

4. The stipend of the Scholarship shall be payable half-yearly on a bill drawn by the Head of the College, which bill shall certify, under his signature, that the Scholar is in regular attendance at the College, that his conduct is good, and that his progress in University studies is satisfactory.

5. Should the Scholar discontinue his University studies, or be unfavourably reported on by the Head of his College, the Syndicate shall declare the Scholarship to be forfeited.

6. In case of the Student who is elected declining to proceed to College, the stipend of the Scholarship for the ensuing year may be conferred on the Candidate who shall have obtained the second place in the examination.

7. In case of the Scholarship lapsing through forfeiture or otherwise, during the course of the year, the money shall be reserved to be applied by the Syndicate in such manner as they shall think best fitted for furthering the object of the endowment.

YEAR.	SCHOLAR.	SCHOOL.
1876	Thákore, Jádavrái Hakumatrái	Surat High School.
1877 ..	Desái, Náthábhái Avichaldás	Nariád High School.
1878	Divechá, Vanmáli Mulji	Bombay High School.
1879 ..	Shroff, Bhállái Purshottam	Nariád High School.
1880 .	Korá, Bálábhái Gulábchand	Ditto.
1881 .	Mehtá, Gokaldás Rájpál	Káthiáwár High School, Rájkot.

XXIX.

THE DHIRAJLAL MATHURADAS SCHOLARSHIP.

In July 1877, Ati Lakshumibai, widow of the late Dhirajlal Mathuradas, Esq., a Justice of the Peace, Fellow of the University of Bombay, and Government Pleader, High Court, Bombay, offered to the University the sum of Rs. 6,000 in Government 4 per cent. Promissory Notes for the foundation of an annual Scholarship, to be called "THE DHIRAJLAL MATHURADAS SCHOLARSHIP," and to be awarded to a Gujaráthi Hindu who passes the B.A. Examination with the highest number of marks, and who prosecutes his studies in a School of Law recognized by the University of Bombay.

At the annual meeting of the Senate, held on the 19th December 1877, the offer was accepted with the best thanks of the Senate.

The Scholarship will be awarded in accordance with the following Regulations :—

1. A Scholarship, to be called "THE DHIRAJLAL MATHURADAS SCHOLARSHIP," of the value of Rs. 240 per annum, tenable for two years, shall be awarded every alternate year to the Gujaráthi Hindu who passes the Examination for the Degree of B.A. with the highest number of marks, and elects to prosecute his studies in a School of Law recognized by the University of Bombay.

2. In case of the Student who is elected, declining to proceed to a School of Law, or failing to satisfy the University Registrar, within six weeks from the date of election, that he has duly joined a recognized School of Law, the Scholarship may be conferred on similar conditions on the Gujaráthi Hindu who shall have obtained the second place in the examination.

3. In case of a vacancy occurring between the fixed dates of election, the interest of the endowment shall be applied by the Syndicate in such way as may appear to them best fitted for furthering the purposes of the endowment.

YEAR.	SCHOLAR.	COLLEGE.
1878..	Desái, Mánekiál Sákarlál	Elphinstone.
1880 .	Divátiá, Narsingráo Bholánáth	Ditto.

XXX.

THE SINCLAIR PRIZE.

The President of the "Sinclair Memorial Committee" offered to the University the sum of Rs. 1,500 in Government 4 per cent. Promissory Notes for the foundation of an annual Prize in memory of the late Robert Sharpe Sinclair, LL.D., the first Director of Public Instruction, Berar, and for several years previously the Registrar of this University, to be awarded to the Candidate who at Matriculation passes the best examination in Sanskrit or Persian, from a High School in Berar.

At the annual meeting of the Senate, held on the 19th December 1877, the offer was accepted with the best thanks of the Senate.

The Prize will be awarded in accordance with the following Regulations :—

1. A Prize, to be called "THE SINCLAIR PRIZE," of the value of Rs. 60, shall be awarded annually at the Matriculation Examination to the Candidate from a High School in Berar who passes with the highest number of marks in Sanskrit or Persian.

2. The name of the successful Candidate will be published with the list of the Candidates who pass the Matriculation Examination.

3. Whenever the Prize is not awarded, the interest of the endowment shall be applied by the Syndicate in such way as may appear to them best fitted for furthering the purposes of the endowment.

YEAR.	PRIZEMAN.	LANGUAGE.	SCHOOL.
1878..	Joshi, Moro Vishvanáth.	Sanskrit	Amráoti High School.
1879..	Chaván, Bastisinh Duniásinh.	Ditto	Ditto.
1880..	Abhyánkar, Krishnáji Bháskar	Ditto	Akolá High School.
1881	Khánzode, Ambádás Rávji	Ditto	Amráoti High School.

XXXI.

THE GIBBS PRIZE

Jehanghier Cowasjee Jehanghier Readymoney, Esq., a Justice of Peace, in a letter, dated the 17th November 1878, offered to the University the sum of Rs. 2,000 for the foun-

dation of a Gibbs Prize as a memorial of the Honourable Mr. Gibbs' friendship for his father, the late Sir Cowasjee Jehanghier, to be awarded to the Candidate who passes the Previous Examination with the highest number of marks in Natural Science.

At the annual meeting of the Senate, held on the 21st December 1878, the offer was accepted with the best thanks of the Senate.

The Prize will be awarded in accordance with the following Regulations:—

1. A Prize, to be called "THE GIBBS PRIZE," consisting of books of the value of Rs. 80, shall be awarded every year to the Candidate who passes the Previous Examination with the highest number of marks in Natural Science.

2. The name of the successful Candidate will be published with the list of Candidates who pass the Previous Examination.

YEAR.	PRIZEMAN.	SCHOOL.
1879 ..	Sanjáná, Jehángier Barjorji	Free General Assembly's Institution, Bombay.
1880 .. (April.)	Vakil, Ochhárám Nánábhái.....	Elphinstone College.
1880 .. (Dec.)	Deshmukh, Moreshvar Gopál	Ditto.
1881 ..	Pádsháh, Barjorji Jámásji	Ditto.

XXXII.

THE NARAYAN VASUDEV SCHOLARSHIP.

Nanabhoy Byramjee Jeejeebhoy, Esq., in a letter dated the 2nd December 1878, to the address of the Honourable James Gibbs, C.S.I., Vice-Chancellor, offered to the University, on behalf of the subscribers to the "Narayan Vasudev Memorial," a sum of Rs. 5,000 in Government 4 per cent. Promissory Note, for the foundation of an annual Scholarship to be called "THE NARAYAN VASUDEV SCHOLARSHIP," to be awarded under such rules and in such manner as the Senate may be pleased to decide.

At the annual meeting of the Senate, held on the 21st December 1878, this offer was accepted with the best thanks of the Senate.

The Scholarship will be awarded in accordance with the following Regulations:—

1. A Scholarship, to be called "THE NARAYAN VASUDEV SCHOLARSHIP," of the value of Rs. 200 per annum, shall be awarded every year to the Candidate who passes the B.A. Examination with the highest number of marks in Natural Science and is recommended for the Scholarship by the Examiner, on condition that he continues his studies during his tenure of the Scholarship at one of the Colleges or Institutions recognized by the University of Bombay.

2. The Candidate elected must satisfy the Registrar, within six weeks from the date of election, that he has duly joined a recognized College or Institution.

3. The stipend of the Scholarship shall be paid half-yearly on a bill drawn by the Head of some recognized College or Institution, who shall certify under his signature on such bill that the Scholar is in regular attendance at the College or Institution, and that his conduct is good.

4. Should the Scholar discontinue his University studies, or be unfavourably reported on by the Head of his College or Institution, the Syndicate shall declare the Scholarship to be forfeited.

5. Any surplus which may arise from the vacancy of the Scholarship during any year, or a part of a year, shall be applied by the Syndicate in such manner as they shall think best fitted for furthering the objects and purposes of the endowment.

YEAR.	SCHOLAR.	COLLEGE
1879..	Dastur, Dhanjishâh Hormasji	Elphinstone.
1880..	Mirzá, Nasarvánji Frámji	St. Xavier's.
1881..	Javakar, Sundarráo Gajánan	Ditto.

XXXIII.

THE COBDEN CLUB MEDAL.

In March 1879, the Cobden Club offered to award a Silver Medal annually to the Candidate who passes the B.A. Examination of this University with the highest number of marks in Political Economy.

At a meeting of the Senate, held on the 22nd November 1879, this offer of the Cobden Club was accepted with the best thanks of the Senate. This Medal will be awarded in accordance with the following Regulations:—

1. A Silver Medal, to be called "THE COBDEN CLUB MEDAL," will be awarded annually to the Candidate who passes the B.A. Examination with the highest number of marks in Political Economy.

2. The name of the Candidate to whom the Medal is awarded will be published with the list of successful Candidates.

3. The Medal will be presented at the Convocation for conferring Degrees.

YEAR.	MEDALLIST.	COLLEGE.
1879..	Cámá, Rastam Kharshedji	St. Xavier's.
1880..	Pandiá, Chhaganlál Harilál	Elphinstone.
1881..	Kelkar, Vásudev Bálkrishna.....	Ditto.

XXXIV.

THE SIR GEORGE LEGRAND JACOB SCHOLARSHIP.

In June 1879, Major-General Sir George LeGrand Jacob offered to hand over to the University Government Paper realizing Rs. 120 a year for the foundation of a Scholarship of the value of Rupees 10 a month and tenable for one year, to be awarded to the Candidate who passes the Matriculation Examination with the highest number of marks from among the Candidates from Sávantvádi, Kutch, Kolhápur and Káthiáwár.

At a meeting of the Senate, held on the 22nd November 1879, this offer was accepted with the best thanks of the Senate.

The Scholarship will be awarded in accordance with the following Regulations :—

1. A Scholarship to be called the "SIR GEORGE LEGRAND JACOB SCHOLARSHIP," of the value of Rs. 10 a month and tenable for one year, shall be awarded annually to the Candidate who passes the Matriculation Examination with the highest number of marks from among the Candidates from Sávantvádi, Kutch, Kolhápur, or Káthiáwár.

2. The name of the Candidate to whom the Scholarship may be awarded shall be published with the list of the successful Candidates.

3. The Candidate elected must satisfy the Registrar within six weeks from the date of election that he has duly joined a recognized College or Institution.

4. The stipend of the Scholarship shall be payable monthly on a bill drawn by the Head of some recognized College or Institution, which bill shall certify, under the signature of the Head, that the Scholar is in regular attendance at the College or Institution, that his conduct is good, and his progress in University studies is satisfactory.

5. Should the Scholar discontinue his University studies, or be unfavourably reported of by the Head of his College or Institution, the Syndicate shall declare the Scholarship to be forfeited.

6. Whenever the Scholarship is not awarded, the money shall be reserved to be applied by the Syndicate in such manner as they shall think best fitted for furthering the object of the endowment.

XXXV.

THE SIR GEORGE LEGRAND JACOB PRIZE.

In June 1879, Major-General Sir George LeGrand Jacob offered to create in favour of the University a trust of £1,000 Stock and one £100 10 per cent. Debenture Bond in the British India Tea Company, Limited, the proceeds thereof to be expended on an annual Prize for an Essay on some subject illustrating or relating to the advantages derived by India from the British rule.

At a meeting of the Senate, held on the 22nd of November 1879, this offer was accepted with the best thanks of the Senate.

The prize will be awarded in accordance with the following Regulations :—

1. A Prize to be called the "SIR GEORGE LEGRAND JACOB PRIZE" consisting of books, shall be awarded annually for the best Essay on some subject illustrating or relating to the advantages derived by India from British rule.

2. Competitors shall be Graduates or Undergraduates of the University of Bombay of not more than seven years' standing from the date of their Matriculation on the day prescribed for the sending in of the Essays.

3. The subject shall be selected or notified by the Syndicate not less than twelve months before the day for sending in the Essay.

4. The Essays shall be sent in to the University Registrar on or before the Fourth Monday in July. Each Essay shall be designated by a motto instead of the writer's name, and shall be accompanied by a sealed cover containing the name of the competitor, his University standing, his post-office address, and a declaration that the Essay sent in by him is *bonâ fide* his own composition.

5. The Judges shall be three in number, and shall be nominated annually by the Syndicate. Their decision shall be announced on the Fourth Monday in September.

6. On the occasions when the Prize is not awarded, the money shall be applied by the Syndicate in such manner as they shall think best fitted for furthering the object of the endowment.

YEAR.	SUBJECT.	PRIZEMAN.	COLLEGE.
1882	Travelling in India and Intercommunication between the several Provinces before and after the Introduction of British Rule.		

XXXVI.

THE JAIRAZBHOY PEERBHOY SCHOLARSHIP.

Jairazbhoy Peerbhoy, Esq., a Justice of the Peace, in a letter dated 26th January 1881, to the address of the Vice-Chancellor, the Honourable Mr. Justice West, offered to the University a sum of Rupees 5,000, in 4 per cent. Government paper, for the purpose of founding a Scholarship to be annually awarded to the Muhammadan Candidate who passes the Matriculation Examination with the highest number of marks, and prosecutes his studies in this University, or proceeds to England with the same view.

At a meeting of the Senate, held on the 1st October last, this offer was accepted with the best thanks of the Senate.

The Scholarship will be awarded in accordance with the following Regulations :—

1. A Scholarship, to be called "THE JAIRAZBHOY PEERBHOY SCHOLARHIP," of the value of Rs. 200 per annum, shall be awarded every year to the Muhammadan Candidate who passes the Matriculation Examination with the highest number of marks, on condition that he continues his studies during his tenure of the Scholarship at one of the Colleges or Institutions recognized by the University of Bombay, or proceeds to Great Britain or Ireland to prosecute his studies.

2. Candidates must forward their applications to the Registrar, with their applications for permission to attend the Matriculation Examination of the same year.

3. The Candidate elected must satisfy the Registrar, within six weeks from the date of election, that he has duly joined a recognized College or Institution or has proceeded to Great Britain or Ireland for the purpose of prosecuting his studies.

4. The stipend of the Scholarship shall be paid half-yearly on a bill drawn by the Head of some recognized College or Institution, who shall certify under his signature on such bill, that the Scholar is in regular attendance at the College or Institution, and that his conduct is good.

5 Should the Scholar discontinue his University studies or be unfavourably reported on by the Head of his College or Institution, the Syndicate shall declare the Scholarship to be forfeited.

6. Any surplus, which may arise from the vacancy of the Scholarship or otherwise, shall be applied by the Syndicate in such manner as they shall think best fitted for furthering the objects and purposes of the endowment.

XXXVII.

THE VARJIVANDAS MADHAVDAS SANSKRIT SCHOLARSHIP.

Varjivandas Madhavdas, Esq., a Justice of the Peace and Fellow of the University, in a letter dated the 5th January

1882, to the address of the Vice-Chancellor, the Honourable Mr. Justice West, offered to the University a sum of Rupees 5,000, in 4 per cent. Government paper, for the purpose of founding a Scholarship to be annually awarded to the Candidate who passes the First Examination for the Degree of B.A. with the highest number of marks in Sanskrit.

At a meeting of the Senate, held on the 7th March 1882, this offer was accepted with the best thanks of the Senate.

The Scholarship will be awarded in accordance with the following Regulations.—

A Scholarship, to be called "THE VARJIVANDAS MADHAVDAS SANSKRIT SCHOLARSHIP," of the value of Rs. 180 per annum, shall be awarded every year to the Candidate who passes the First Examination for the Degree of B.A. with the highest number of marks in Sanskrit and is recommended for the Scholarship by the Sanskrit Examiners, on condition that he continues his studies in Sanskrit for the Second Examination for the Degree of B.A. during his tenure of the Scholarship at one of the Colleges or Institutions recognized by the University of Bombay.

2. The Candidate elected must satisfy the Registrar, within six weeks from the date of election, that he has duly joined a recognized College or Institution.

3. The stipend of the Scholarship shall be paid half-yearly on a bill drawn by the Head of some recognized College or Institution, who shall certify, under his signature on such bill, that the Scholar is in regular attendance at the College or Institution, and that his conduct is good.

4. Should the Scholar discontinue his University studies or be unfavourably reported on by the Head of his College or Institution, the Syndicate shall declare the Scholarship to be forfeited.

5. Any surplus which may arise from the vacancy of the Scholarship or otherwise shall be applied by the Syndicate in such manner as they shall think best fitted for furthering the objects and purposes of the endowment.

IX.

Benefactions.

I.

THE SIR COWASJEE JEHANGHIER HALL OF THE UNIVERSITY OF BOMBAY.

Cowasjee Jehanghier Readymoney, Esquire, Justice of the Peace and Fellow of the University, in a letter to the Vice-Chancellor, Sir Alexander Grant, Bart., dated the 27th April 1863, offered the sum of Rs. 1,00,000 for the erection of University Buildings, under the following conditions :—That Government contribute the remainder of the sum necessary for the buildings, and grant a site on the Esplanade, and that no subscription from any other private person be received for this object.

This offer was accepted by Government and referred to the University, and at a Convocation of the Senate, held on the 18th July 1863, the following Resolution was passed :—

"That the Senate accept the noble gift of Cowasjee Jehanghier, Esquire, with the liberal augmentation offered by Government and with the recognition of the liabilities imposed

on this University by its holding the University buildings, when completed, according to the Act of Incorporation; but on the understanding that Mr. Cowasjee concurs in the interpretation which Government puts upon his conditions in the third and fourth paragraphs of its letter, No. 260, dated 29th May 1863, to the address of Sir Alexander Grant, Bart., Vice-Chancellor."

Note.—The interpretation of Government, referred to, was as follows :—

"His Excellency in Council understands the third condition specified in Mr. Cowasjee Jehanghier's letter as implying that a building for the University is to be completed at the joint expense of that gentleman and of Government without accepting contributions from any other source, so that it may form in itself a separate and permanent monument of Mr. Cowasjee Jehanghier's desire to provide the University with a local habitation.

"As, however, the duties and wants of the University increase, His Excellency the Governor in Council hopes that the example so worthily set by Mr. Cowasjee Jehanghier will be followed by other University benefactors, and Government feel assured that that gentleman would be the last to exclude those who may wish to follow his noble example from adding to or adorning the edifice which he has been the first to raise."

This interpretation was formally accepted by Mr. Cowasjee Jehanghier in a letter to Government dated the 8th August 1873.

At a meeting of the Senate, held on the 4th March 1875, the following Resolution was unanimously passed :—

That, in recognition of Sir Cowasjee Jehanghier Readymoney's noble gift of Rs. 1,00,000 for the erection of University Buildings, the Hall, now handed over by Government to the University, be named "THE SIR COWASJEE JEHANGHIER HALL OF THE UNIVERSITY OF BOMBAY."

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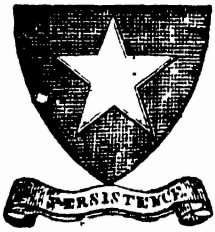
II.

UNIVERSITY ARMS AND COMMON SEAL

Cowasjee Jehanghier Readymoney, Esquire, Justice of the Peace and Fellow of the University, in a letter to G. C. M. Birdwood, Esq., M.D., Fellow of the University, dated 24th September 1863, forwarded a donation of Rupees 1,200 to meet the expense of a Grant of Arms to the University, and the engraving of a University seal. This donation was accepted at a meeting of the Senate held on the same day, with a vote of thanks to the donor for his timely and liberal benefaction.

III.



UNIVERSITY LIBRARY.

Premchund Roychund, Esquire, in a letter to Government dated the 27th August 1864, made the following request :—

"I have the honour to request that Government will have the goodness to communicate to the University of Bombay my desire to offer most respectfully to that learned body the sum of Rupees (2,00,000) two lacs towards the erection of a University Library, which may be an ornament to this city, and, by becoming a storehouse of the learned works, not only of the past but of many generations to come, may be a means of promoting the high ends of the University."

At a meeting of the Senate, held on the 10th September 1864, it was resolved "that the Senate cordially and unanimously accept, with their best thanks, Mr. Premchund Roychund's noble gift."

IV.

THE RA'JA BA'I TOWER.

Premchund Roychund, Esquire, in a letter to Government, dated 6th October 1864, made the following request:—

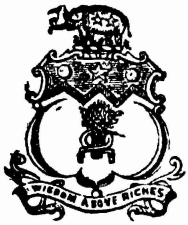
"I have the honour to request that Government will do me the favour to offer to the University of Bombay, in the name of my good mother, Rájábái, (2,00,000) two lacs of Rupees for the erection of a Tower to contain a large clock and a set of joy-bells.

"If there be no architectural objections, I should like the Tower to be in connection with the University Library."

At a meeting of the Senate, held on the 10th December 1864, it was unanimously resolved "that the Senate do accept the noble gift of Mr. Premchund Roychund of two lacs of Rupees for the erection of a Tower to contain a large clock and a set of joy-bells; and that the grateful thanks of the Senate be conveyed to Mr. Premchund Roychund."

It was further unanimously resolved "that the Tower be named 'THE RA'JA'BA I TOWER' in commemoration of Mr. Premchund Roychund's mother."

V.



UNIVERSITY MACE.

Munguldass Nathoobhoy, Esquire, Justice of the Peace and Fellow of the University, in a letter to the Registrar, Dr. R. S. Sinclair, dated the 18th November 1864, offered Rs. 1,200 for the purpose of providing the University with a Mace.

At a meeting of the Senate, held on the 10th December 1864, it was unanimously resolved " that Mr. Munguldass Nathoobhoy's handsome offer of Rs. 1,200 for a Mace for the University be accepted with thanks."

X.

The University, 1882-83.

SENATE.

CHANCELLOR.

His Excellency the Right Honourable SIR JAMES FERGUSSON, Bart., K.C.M.G., C.I.E.

	Faculty.*			
VICE-CHANCELLOR.				
1. The Honourable Raymond West, C.S., M.A., LL.D., F.R.G.S.	A	L	...	...
DEANS.				
2. W. Wordsworth, B.A.—*In Arts* ...	A	L	...	...
3. The Honourable F. L. Latham, M.A. —*In Law.*	A	L	...	...
4. H. V. Carter, M.D.—*In Medicine* ...	A	...	M	...
5. Lieut.-General J. A. Fuller, R.E., C.I.E.—*In Engineering.*	...	...	...	E
SYNDICS.				
6. C. E. Fox, M.A. ... (*In Arts.*)	A	L	...	...
7. C. Chambers, F.R.S. ... (*In Arts.*)	A	...	...	E
8. Kashinath Trimbak Telang, M.A., LL.B. (*In Arts.*)	A	L	...	...
9. The Honourable Ráo Sáheb Vishvanath Narayan Mandlik, C.S.I., M.R.A.S.—*In Law.*	A	L	...	E
10. G. A. Maconachie, M.D., C.M. (*In Medicine.*)	...	...	M	...
11. H. J. Blanc, B.A., B.Sc., M.D (*In Medicine.*)	...	...	M	..
12. T. Cooke, M.A., M.I., LL.D., F.R.G.S., Mem. Inst. C.E.I. ... ... (*In Engineering.*)	A	L	...	E
13. Lieut.-Colonel G. L. C. Merewether, R.E. ... (*In Engineering.*)	A	...	...	E

* A stands for Arts, L for Laws, M for Medicine, and E for Civil Engineering.

FELLOWS.	Faculty.			
Ex-officio.				
14. His Excellency Lieut.-General the Honourable Arthur Edward Hardinge, C.B., *Commander-in-Chief.**	...	...	...	E
15. The Honourable Sir Charles Sargent, Knight, M.A., *Acting Chief Justice*, 1867.	A	L	...	...
16. The Right Reverend Louis George Mylne, M.A., D.D., *Bishop of Bombay**	A	...	...	...
17. The Honourable L. R. Ashburner, C.S., C.S.I., 1873. (*Members of Council.*)	A	...	...	...
18. The Honourable E. W. Ravenscroft, C.S., C.S.I., 1868. (*Members of Council.*)	A	...	...	...
19. K. M. Chatfield, M.A., *Director of Public Instruction*, 1866.	A	L	...	...
20. Lieut.-Colonel Thomas Waddington, *Educational Inspector, Central Division*, 1863.	A	...	...	...
William Wordsworth, B.A., *Principal, Elphinstone College.**	A	L	...	...
21. R. G. Oxenham, M.A., *Principal, Deccan College*, 1864.	A	...	...	...
H. V. Carter, M.D., *Acting Principal, Grant Medical College.*	A	...	M	...
Theodore Cooke, M.A., M.I., LL.D., F.G.S., Mem. Inst. C.E.I., *Principal, College of Science.**	A	L	...	E
1858.				
22. The Reverend John Murray Mitchell, M.A., LL.D.	A	...	...	...
1862.				
23. The Honourable Lyttelton Holyoake Bayley.	A	L	...	...

* Not gazetted.

	Faculty.			
24. William James Moore, M.D., L.R.C.P. Edin., C.I.E.	...	...	M	...
The Honourable Ráo Sáheb Vishvanath Narayan Mandlik, C.S.I., M.R.A.S.	A	L	...	E
1863.				
25. Henry Napier Bruce Erskine, C.S.	A	...	..	...
26. The Honourable Maxwell Melvill, C.S.	A	L	...	...
27. James Braithwaite Peile, C.S., C.S.I., M.A.	A	L	...	...
The Honourable Raymond West, C.S., M.A., LL.D., F.R.G.S.	A	L	...	...
28. James Bellot Richey, C.S., C.S.I., B.A	A	...	...	...
29. Herbert Mills Birdwood, C.S., M.A., LL.M.	A	L	...	E
Lieut.-Colonel Thomas Waddington	A	...	...	...
Henry Vandyke Carter, M.D.	A	...	M	...
30. Sir Munguldass Nathoobhoy, Knight, C.S.I.	A	...	...	E
31. Manockjee Cursetjee.	...	L	...	.
1864.				
32. Dadabhoy Nowrojee.	A	...	...	.
33. The Reverend Dhanjibhoy Nauroji.	A	...	...	.
34. The Honourable Charles Gonne, C.S.	A	L	..	...
35. Herbert Edward Jacomb, C.S.	A	...	...	...
36. Joshua King, C.S., M.A.	A	...	...	E
37. George Morison Macpherson, C.S., M.A.	A	...	...	...
Robert George Oxenham, M.A.	A	...	...	...
38. Khán Bahádur Padamjee Pestonjee.	...	...	...	E
39. Sorabjee Pestonjee Framjee.	A	...	...	...
40. The Reverend Richard Stothert, M.A.	A	...	...	...
41. Venayakrao Vasudevji.	A	L	...	...
42. William Wedderburn, C.S.	A	L	...	...
43. Ráo Bahádur Dadoba Pandurang.	A	L	...	...

	Faculty.			
1865.				
44. Dhunjeebhoy Framjee Patel.	A	...	...	...
45. The Honourable Theodore Cracraft Hope, C.S., C.S.I.	...	L	...	...
46. Karsandas Madhavdas.	A	...	...	...
47. Ráo Bahádur Keropant Laxuman Chhatre.	A	...	...	E
48. Muncherjee Byramjee Cola, M.D.	...	...	M	...
49. The Honourable John Marriott, B.A.	A	L	...	...
50. Ráo Sáheb Mahipatram Rupram.	A	...	...	...
51. Mahadev Govind Ranade, M.A., LL.B.	A	L	...	...
52. Premchund Roychund.	...	...	...	E
1866 (February).				
53. William Allan Russell, M.A.	A	...	...	...
1866 (April).				
Kyrle Mitford Chatfield, M.A.	A	L	..	...
54. John Cruikshank, M.D.	...	...	M	...
55. William Dymock, B.A.	A	...	M	...
56. Dosabhoy Framjee, C.S.I.	...	L	..	...
57. William Albert East, C.S., B.A.	A	...	...	...
58. Abraham Nickson Hojel, L.K. and Q.C.P.I.	...	...	M	...
59. Khán Bahádur Dastur Hoshang Jamasp.	A	...	...	...
60. Colonel George Adolphus Jacob.	A	...	...	...
61. T. B. Kirkham.	A	...	...	...
62. The Reverend Charles Kirk, M.A.	A	...	...	...
63. Kharshedji Rustomji Cama.	A	...	...	...
64. The Honourable Robert Hill Pinhey, C.S.	A	L	...	...
65. Dastur Peshutan Byramji.	A	...	...	...

	Faculty.			
66. Ramkrishna Gopal Bhandarkar, M.A., Hon. M.R.A.S.	A	...	...	...
67. Vithal Narayan Pathak, M.A.	A	...	...	...
68. Vasudev Pandurang.	...	L	...	...
69. The Reverend Charles Gilder.	A	...	...	...
1867.				
70. The Honourable James Gibbs, C.S., C.S.I., F.R.G.S.	A	L	M	E
The Honourable Sir Charles Sargent, Knight, M.A.	A	L	...	...
71. Arthur Travers Crawford, C.S.	...	...	..	E
72. Clarence Bovill Izon, C.S.	A	...	...	...
73. Isadore Bernadotte Lyon, F.C.S.	A	...	M	E
74. Pherozshah Mervanji Mehta, M.A.	A	L	...	...
75. John George Moore, C.S.	A	...	...	...
76. Shankar Pandurang Pandit, M.A.	A	...	...	...
77. Satyendra Nath Tagore, C.S.	A	L	...	...
78. Bal Mangesh Wagle, M.A., LL.B.	A	L	...	...
79. Major Edward William West.	A	...	...	...
80. Framjee Nasserwanjee Patel.	...	L	...	...
1868 (January).				
81. Lieut.-Colonel W. A. Baker, R.E.	...	...	...	E
82. Major W. M. Ducat, R.E.	...	...	...	E
83. C. E. Fox, M.A.	A	L	...	...
Lieut.-General J. A. Fuller, R.E., C.I.E.	...	...	..	E
84. W. Gray, M.B.	A	...	M	E
85. Colonel H. F. Hancock, R.E.	...	...	...	E
86. Khanderao Chimanrao Bedarkar, B.A., LL.B.	A	L	...	...
87. The Right Rev. Leo Meurin, S.J., D.D.	A	...	...	...
88. Ramchandra Rao Appa Saheb, Chief of Jamkhandi.	...	L	...	...

	Faculty.			
The Honourable E.W. Ravenscroft, C.S., C.S.I.	A	...	...	...
89. The Reverend G.C. Reynell, M.A.	A	...	...	...
90. Sir A. D. Sassoon, Knight, C.S.I.	...	L	...	...
91. Shantaram Narayan.	A	L	...	...
92. The Reverend J. A. Willy, S.J., D.D.	A	...	...	...
1868 (December).				
93. Atmaram Pandurang, G.G.M.C.	A	...	M	...
94. Bhikaji Amrit Chobhe, G.G.M.C.	...	...	M	..
95. Byramjee Jeejeebhoy, C.S.I.	...	L	...	...
96. James Burgess, M.R.A.S., LL.D.	A	...	...	E
97. C. E. Chapman, Ben. C.S.	A	L	...	...
98 J. Harry Rivett-Carnac, Ben. C.S., C.S.I.	A	L	...	...
99. Ráo Bahádur Daji Nilkant Nagarkar.	...	...	...	E
100. The Reverend S. B. Fairbank, M.A.	A	...	...	...
101. Govind Vithal Kurkaray, B.A.	A	L	...	E
102 H. P. Jacob.	A	...	...	...
103. Mahadev Moreshvar Kunte, B. A.	A	...	...	...
104. John Pinkerton, M.D.	A	...	M	..
105 G. B. Reid, C.S., B.A.	A	L	...	...
106. James Scorgie, F.C.S.	A	...	...	E
107. The Reverend D. A. F. de Rozario de Souza.	A	...	...	...
108. Nowroji Fardunji. —	A	L	...	...
1869.				
109. The Reverend Thomas Carss M.A.	A	...	...	...
1870.				
110. Atmaram Sadashiv G. Jayakar, L M., M.R.C.S., L R.C.P.	...	...	M	...
111. Colin Browning, M.A.	A	...	...	..

	Faculty.			
112. Cursetjee Nasserwanjee Cama.	A	...	...	...
113. The Reverend J. G. Cooper.	A	...	...	...
114. C. F. Farran, B.A.	A	L	...	...
115. T. P. H. Macartney Filgate.	A	...	...	...
116. Gopal Raoji Tilak, L.C.E.	...	...	...	E
117. Harichand Sadashivji, Assoc. M. Inst. C.E.	A	...	...	E
118. D. S. Kemp, F.C.S.	...	...	M	...
119. W. F. Knapp, M.R.C.S.	...	...	M	...
120. E. Tyrrell Leith, LL.M., F.R.G.S., M.R.A.S., M.A.I.	A	L	...	...
121. John Lumsdaine.	...	...	M	...
122. Nagindas Tulsidas Marphatia, B.A., LL.B.	A	L	...	...
123. Ráo Bahádur Nana Moroji.	...	L	...	...
124. Raghunath Narayan Khote.	A	...	...	...
125. Rahimtulah Muhammad Sayani, M.A., LL.B.	A	L	...	...
126. Sorabji Shapurji Bengali, C.I.E.	A	...	...	...
127. Lieut.-Colonel J. H. White, R.E.	A	...	...	E
1871.				
128. The Honourable Charles Gurdon Kemball, C.S.	A	L	...	...
129. G. M. Stewart.	A	...	...	..
130. G. Atkinson, B.A., Serjeant-at-Law.	...	L	...	..
131. Samuel Cooke, M.A., F.I.C., F.G.S., Assoc. M. Inst. C.E.	A	...	...	E
132. Homejee Cursetjee Dady.	A	...	...	...
133. Edaljee Nasserwanjee, G.G.M.C.	...	...	M	...
134. J. Flynn.	A	...	...	...

	Faculty.			
135. J. H. E. Hart, C.E.	...	...	...	E
136. T. G. Hewlett, C.I.E.	...	...	M	..
137. Chester Macnaghten, M.A.	A	...	...	...
Lieut.-Colonel G. L. C. Merewether, R.E.	...	...	...	E
138. John Nugent, C.S.	A	L	...	...
139. Sidney Smith, M.D.	...	...	M	...
140. Moreshvar Atmaram Tarkhad, F.G.S.	A	...	...	...
1872.				
141. K. T. Best, M.A.	A	...	...	...
Charles Chambers, F.R.S.	A	...	...	E
142. H. Cook, M.D., M.R.C.P., F.R.G.S., F.G.S., F.M.S.	A	...	M	...
143. J. A. Forbes.	A	...	...	...
144. Ráo Bahádur Ganpatrao Bhaskar.	A	L	...	...
145. W. G. Hall.	A	...	...	E
146. John Jardine, C.S.	A	L	...	...
147. Nanabhoy Byramjee Jeejeebhoy.	A	...	...	...
148. Jamsetji Palanji Kapadia.	A	...	...	...
149. W. Lee-Warner, C.S., M.A.	A	L	...	...
150. Vaman Abaji Modak, B.A.	A	...	...	...
151. Ardesir Framji Moos.	A	...	...	...
152. Captain H. Morland, late I. N., F.R.A.S., F.R.G.S.	A	...	..	E
153. Nanabhai Haridas, LL.B.	A	L	...	...
154. Nacoda Mahomed Ally Rogay.	A	...	...	...
155. Shantaram Vithal Sanzgire, L.M.	...	...	M	...
156. Khán Bahádur Jamsetji Dhanjibhai Wadia.	A	...	...	E
1873.				
The Honourable L. R. Ashburner, C.S., C.S.I.	A	...	...	...
157. Balaji Pandurang Bhalerao.	A	...	...	...
158. Ananta Chandroba, G.G.M.C.	...	...	M	...

	Faculty.			
The Honourable F. L. Latham, M.A.	A	L	...	...
159. E. Rehatsek, M.C.E.	A	...	...	E
160. The Reverend Narayan Sheshadri.	A	...	...	...
161. Framji Rastamji Vikaji, B.A., LL.B.	A	L	...	...
162. Kaikhosru Rastamji Vikaji, L.M., M.D.	...	...	M	...
163. Javerilal Umiashankar Yajnik.	A	...	...	...
1874.				
164. J. Anderson, K.L.S.	...	...	M	...
165. Andrew Paul deAndrade, G.G.M.C.	A	...	M	...
166. J. K. Bythell.	A	...	...	...
167. James Macnabb Campbell, C.S.	A	...	...	...
168. J. Gerson Da Cunha, M.R.C.S., L.R.C.P.	...	...	M	...
169. A. W. Forde, Mem. Inst. C.E.	...	...	...	E
170. J. Temperley Gray, L.R.C.P. Lond., A.K.C.	A	...	M	...
171. W. E. Hart, B.A.	A	L	...	...
172. J. T. Hathornthwaite, M.A.	A	...	...	E
173. T. Holmested.	...	...	M	...
174. H. E. M. James, C.S.	A	...	...	...
175. Ráo Bahádur Vasudev Bapuji Kanitkar.	...	...	...	E
176. Ráo Bahádur MakundRamchandra.	...	...	...	E
177. Major G. W. Oldham, R.E.	...	...	...	E
178. The Honourable J.Q. Pigot, B.A....	...	L	...	...
179. Captain W. F. Prideaux.	A	...	...	...
180. Sakharam Arjun Ravut, L.M. ...	...	...	M	...
181. P. Ryan.	...	L	...	...
182. Khán Bahádur Kazi Shahabudin, C.I.E.	A	...	...	...
183. Ráo Bahádur Janardan Vasudevji.	...	L	...	...
184. Major J. W. Watson.	A	...	...	...
185. Sir F. H. Souter, Knight, C.S.I.	A	...	...	...

	Faculty.			
1874 (June).				
186. E. P. Robertson, C.S.	A	...	...	...
1875.				
187. James Arnott, M.D., C.M.	...	...	M	E
188. Badrudin Tyabji.	A	L	...	...
189. Kashinath Ramchandra Godbole, B.A., L.C.E.	...	...	...	E
190. Gopal Shivram Vaidya, L.M.	...	...	M	...
191. The Honourable Sir Jamsetjee Jeejeebhoy, Bart.	A	...	...	...
192. Khán Bahádur Mancharji Kavasji Murzban, Assoc. Inst. C.E.	...	...	...	E
193. Nanabhai Rastamji Ranina.	A	...	...	...
194. Shamrao Vithal.	...	L	...	...
195. J. L. Kipling.	A	...	...	...
1876.				
196. Ráo Bahádur Bechardas Ambaidas, C.S.I.	A	...	...	...
197. Raja Sir T. Madhavrao, K.C.S.I.	A	...	...	...
198. Khán Bahádur Bamanji Sorabji, L.C.E., A.M.I.C.E.	...	...	...	E
199. The Reverend Charles Cooke, S.J., B.A.	A	...	...	...
200. James Jardine, M.A.	A	L	...	E
G. A. Maconachie, M.D., C.M.	...	...	M	...
201. Mirza Hairat.	A	...	...	...
202. Narayan Ballal Limaye.	A	...	...	...
203. L. P. de Rozario, L.M.	...	...	M	...
204. Rastamji Nasarvanji Khori, L.M., M.D., M.R.C.P. Lond., F.R.C.S. Lond., F.R.O.S.	...	...	M	...

	Faculty.			
1877.				
205. Anna Moreshvar Kunte, B.A., M.D.	A	...	M	...
206. Lieut. James Brebner, I.N., Assoc. Inst. C.E.	...	...	...	E
207. Dastur Jamaspji Minocherji Jamaspasana.	A	...	...	...
208. S. Newcome Fox, B.A.	A	L	...	...
209. Edward Giles, B.A.	A	...	...	...
210. The Reverend J. M. Hamilton, S.J.	A	...	...	...
211. H. I. B. Hargrave, B.A., C.E.	A	...	...	E
212. Jamsetji Ardesir Dalal, M.A., LL.B.	A	L	...	...
213. Jehangier Barjorji Vacha.	A	...	...	E
214. Hormasji Jehangier Bhabha, M.A.	A	...	...	...
Kashinath Trimbak Telang, M.A., LL.B.	A	L	...	...
215. Kamrudin Tyabji.	...	L	...	...
216. J. C. Lisboa, G.G.M.C.	...	...	M	...
217. The Reverend D. Mackichan, M.A., B.D.	A	...	...	E
218. Manasukharam Suryaram Tripathi.	A	...	...	...
219. Captain E. C. Marryat, R.E.	...	...	...	E
220. Hamilton Maxwell.	A	..	...	...
221. Peter Peterson, M.A.	A	L	M	E
222. Varjivandas Madhavdas.	A	...	...	...
223. G. C. Whitworth, C.S.	A	...	...	...
224. A. Wingate, C.S., C.I.E.	A	...	...	...
225. Captain C. Wodehouse.	A	...	...	...
1878.				
226. Cowasjee Hormasjee, G.G.M.C.	...	...	M	...
227. Philip Clement De Souza, L.M.	A	...	M	...
228. The Honourable Ráo Bahádur Gopalrao Hari Deshmukh.	...	L	...	...
229. Jamshedji Navroji Unvala, M.A.	A	...	...	...

	Faculty.			
230. The Reverend C. F. H. Johnston, M.A.	A	...	...	E
231. The Very Reverend N. Pagani, S.J.	A	...	...	...
232. The Reverend R. Rive, S.J.	A	...	...	...
233. Yashvant Vasudev Athale, M.A., LL.B.	A	L	...	...
234. George Waters, L.R.C.S., L.R.C.P.E	...	...	M	...
1879.				
235. Ambalal Sakarlal Desai, M.A., LL.B.	...	L	...	...
236. E. B. Carroll, Mem. Inst. C.E.	A	...	...	E
237. Cowasji Pestonji, G.G.M.C.	.	...	M	...
238. Joseph Ezekiel.	A	...	...	...
239. The Reverend F. X. Fibus, S.J., S T.P.	A	...	...	...
240. Jehanghier Cowasjee Jehanghier Readymoney.	...	...	...	E
241. F. G. Selby, B.A.	A	...	...	...
242. The Reverend H. C. Squires, M.A.	A	...	...	...
243 H F. Whyte, B.A.	A	...	...	E
H. J. Blanc, B.A., B.Sc., M.D.	..	...	M	...
244. Wilson Bell, C.E.	A	...	...	E
245. F. Chambers.	A	...	...	E
246. The Honourable Colonel C. J. Merriman, R.E., C.S.I.	A	...	...	E
247. Rienzi G. Walton, M. Inst. C.E., F.R.G.S.	...	...	...	E
248. Grattan Geary.	A	...	...	...
1880.				
249. T. Cody, L R.C.P.	A	...	M	...
250. J. Griffiths.	A	...	...	E
251. Ráo Sáheb Jayasatyabodhrao Tirmalrao Inamdar.	A	...		...
252. D. MacDonald, M.D., B.Sc., C.M.	A	...	M	E
253. F. W. Stevens, Assoc. M. Inst. C.E.	A			E

	Faculty.			
254. T. S. Tait, M.A., B.Sc.	A	...	...	E
255 Vishram Ramji Ghole.	...	...	M	...
1881.				
256. Arthur Barrett, B.A.	A	...	...	...
257 Surgeon-General T. B. Beatty, M.D., F.R.C.S.	A	...	M	...
258. Cowasjee Nowrojee, G.G.M.C.	...	...	M	...
259. Dinanath Atmaram Dalvi, M.A., LL.B.	A	L	...	...
260. Thomas Duncan, M.A., LL B.	A	L	...	...
261. Fardunji Mancherji Dastur, M.A.	A	...	...	...
262. T. Hart-Davis, C.S.	A	L	...	...
263. J. D. Inverarity, B.A., LL.B.	A	L	...	...
264. C. Joynt, M.D., F.K Q C P.	...	...	M	...
265. Kavasji Dadabhai Naegaumvala, M A., F.C.S., F.I.C.	A	...	...	E
266. H. C. Kirkpatrick, M.A.	A	L	...	..
267. Michael Macmillan, B.A.	A	...	...	...
268. Mancherji Navroji Banaji.	A	...	...	...
269. J. W. Orr, M.A.	A	L	...	...
270. Pestonji Mancherji, G.G.M.C.	...	...	M	...
271. W. F. Sinclair, C.S.	A	...	...	...
272. Matthew Starling, B.A., LL.B.	A	L	...	...
273. Vithal Vishnu Gokhale, M.A., L.M. & S.	...	...	M	...
274. E. H. R. Langley, B.A.	A	...	M	...
1882.				
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281. Kaikhosru Navroji Kabraji.	A	...	...	...
282. Mancherji Mervanji Bhownagri.	A	...	...	...

	Faculty.			
283. The Reverend George Shirt, M.A.	A	...	...	...
284. Shivshanker Govindram.	A	L	...	...
285. J. M. Sleater, Mem. Inst. C. E.	...	...	...	E
286. Ráo Bahádur Trimalrao Venkatesh Inamdar.	A	...	...	...
287. Vasudev Krishnarao Dhairyavan, B.A., LL.B.	A	L	...	...

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T. Cooke, M.A., M.I., LL.D., F.R.G.S., Mem. Inst. C.E.I. ... ... } *Syndics in Civil Engineering.*
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Peter Peterson, M.A., Registrar, *Secretary.*

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Peter Peterson, M.A.

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1869. Jan., Kyrle Mitford Chatfield, B.A.

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1876. Jan., The Honourable Raymond West, C.S., M.A., F.R.G.S.
1876. June, William Wordsworth, B.A.
1879. April, James Braithwaite Peile, C.S., C.S.I., M.A.
1880. Jan., William Wordsworth, B.A.
1881. Jan., Herbert Mills Birdwood, C.S., M.A., LL.M.
1881. July, The Rev. John Murray Mitchell, M.A., LL.D.
1882. Jan., The Honourable James Braithwaite Peile, C.S., C.S.I., M.A.
1882. June, WILLIAM WORDSWORTH, B.A.

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1860. July, Arthur James Lewis.
1861. Jan., William Loudon.
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1873. Jan., The Honourable J. P. Green, LL.B.
1874. Jan., The Honourable Andrew Richard Scoble, Q.C.
1876. Mar., The Honourable John Marriott, B.A.
1882. Jan., THE HONOURABLE F. L. LATHAM, M.A.

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1860. Oct., John Peet, M.D.
1865. Jan., Herbert John Graud, M.D.
1865. Oct., Robert Hames, M.B.
1866. June, William Guyer Hunter, F.R.C.S.E.
1867. April, Frank Savignac Stedman.
1868. Jan., Francis Shortt Arnott, M.D., C.B.
1869, Jan., T. W. Ward, F.R.C.S.
1870. Jan., Alexander Wright.
1871. Jan., William Guyer Hunter, M. D., M.R.C.P.
1872. Jan., Alexander Wright.
1874. Jan., William Thom.
1877. Jan., William Guyer Hunter, M.D., F.R.C.P.
1880. Jan., Henry Cook, M.D., M.R.C.P., F.R.G.S., F.G.S., F.M.S.
1882. Jan., William James Moore, M.D., L.R.C.P., Edin., C.I.E.
1882. June, HENRY VANDYKE CARTER, M.D.

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1862. Jan., Colonel H. B. Turner, Bombay Engineers.
1862. Sept., Lieut.-General Walter Scott, Bombay Engineers.
1863. June, Colonel Harry Rivers, Bombay Engineers.
1865. April, Captain H. St. Clair Wilkins, R.E.
1865. Oct., Lieut.-Colonel Alfred DeLisle, R.E.
1867. Jan., Major-General C. W. Tremenheere, R.E., C.B.
1868. Jan., Lieut.-Colonel Alfred DeLisle, R.E.
1868. April, Lieut.-Colonel J. S. Trevor, R.E., C.S.I.
1869. Jan., The Honourable Major-General Sir Michael Kavanagh Kennedy. R.E., K.C.S.I.
1879. Jan., Major-General John Archibald Ballard, R.E., C.B,
1879. Feb., Thomas Ormiston, Mem. Inst. C.E.
1881. Jan., F. Mathew, Mem. Inst. C.E.
1882. June, Lieut.-General J.A. Fuller, R.E., C.I.E.

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1862. Nov., Robert Haines, M.B., *Officiating.*
1863. Nov., Robert Sharpe Sinclair, M.A., LL.D.
1866. July, George Christopher Molesworth Birdwood, M.D.
1867. April, John Powell Hughlings, B.A., *Officiating.*
1868. Jan., George Christopher Molesworth Birdwood, M.D.
1868. Sept., James Taylor.
1874. May, Peter Peterson, M.A., Edin.; B.A. Ball. Coll., Oxon., *Officiating.*
1874. Sept., The Rev. D. C. Boyd, M.A.
1877. June, Peter Peterson, M.A., Edin.; B.A. Ball. Coll., Oxon.

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Sir William Yardley, Knight.

---

* Deceased.

* The Right Reverend John Harding, D.D.
* Lieut.-General Sir Henry Somerset, K.C.B.
* The Honourable James Grant Lumsden, C.S.
The Honourable Arthur Malet, C.S.
* Edward Irvine Howard, M.A.
* Robert Haines, M.B.
Charles Morehead, M.D.
John Harkness, M.A., LL.D.
* The Reverend James McDougall.
* The Honourable Philip William LeGeyt, C.S.
* Sir Matthew Richard Sausse, Knight.
* Sir Jamsetjee Jeejeebhoy, (first) Bart.
* Metcalfe Larken, C.S.
* The Honourable Jugonnath Sunkersett.
* Bomanjee Hormasjee.
* Bhau Daji, G.G.M.C., Hon. M.R.A.S.
* Matthew Stovell, M.D., M.R.C.S.E.
The Honourable Claudius James Erskine, C.S.
* The Honourable William Edward Frere, C.S., C.M.G.
* Major-General Charles Waddington, C.B.
* The Reverend John Wilson, D.D., F.R.S.
* The Reverend Philip Anderson, M.A.
The Right Honourable Sir Henry Bartle Edward Frere, Bart., G.C.B., G.C.S.I., D.C.L.
Lieut. Edward Frederick Tierney Fergusson, I.N.
* Mahomed Yusoof Moorgay, Cazee of Bombay.
* James John Berkley, M.I.C.E., F.G.S.
* Sir Henry Lacon Anderson, C.S., K.C.S.I.

1857.

* The Honourable H. W. Reeves, C.S.

1858.

* The Honourable A. J. Lewis.
* J. J. Lowndes.
The Honourable Sir Barrow Helbert Ellis, C.S., K.C.S.I.

---

* Deceased.

Colonel H. B. Turner, R E.
* Major-General William Frederick Marriott, C.S.I.
* Major J. H. G. Crawford, R E.
Major-General Harry Rivers, R E.
* The Reverend William Kew Fletcher, M.A.
* Rao Bahadur Bhaskar Damodar.
B. P. Rooke, M D.
Herbert John Giraud, M.D.
The Honourable Sir Joseph Arnould, Knight, M.A.

1860.

* Lieut.-General Sir William Rose Mansfield, G.C.B., G.C.S I.
* John Peet, M.D.
* A. H. Leith, M.D.
H. J. Carter, F.R.S.
Lieut.-General W. Scott.
The Honourable Sir Michael Roberts Westropp, Knight, B.A.
W. R. Cassels.
* Sorabjee Jamsetjee Jeejeebhoy.
William Loudon.
* Narayan Dinanathji.
James Fraser Hore, M.A. (July).
Sir Alexander Grant, Bart., M.A., LL.D. (December).

1862.

* The Honourable A. Kinloch Forbes, C.S.
* Major-General John Archibald Ballard, R.E., C.B.
Major-General Henry James Barr.
George Christopher Molesworth Birdwood, M.D., C.S.I.
* Major Thomas Candy, C.S.I.
* Sir Cowasjee Jahanghier Readymoney, Knight, C.S.I.
Lieut.-Colonel Alfred DeLisle, R.E.
The Reverend Francis Gell, B.A.
The Reverend J. Glasgow, D.D.
Major-General Sir Frederick John Goldsmid, C.B., K.C.S.I.

---

* Deceased.

* Gokuldas Tejpal.
R. W. Graham, Mem. Inst. C.E.
* D. Grierson, M.D.
W. Hart, C.S.
* Martin Haug, Ph D.
* John Powell Hughlings, B.A.
* The Reverend C. M. Isenberg.
* Sir Jamsetjee Jeejeebhoy, (second) Bart., C.S.I.
* The Honourable Jonathan Duncan Inverarity, C S.
The Honourable Samuel Mansfield, C.S., C.S.I.
The Reverend Ward Maule, LL.B.
* Rao Bahadur Maganbhai Karamchand.
The Honourable Henry Newton, C.S.
* Colonel J. Pottinger, C.B.
Richard Tuohill Reid, LL.D.
Michael John Maxwell Shaw-Stewart, C.S.

1863.

The Honourable Sir Richard Couch, Knight.
The Honourable Henry Pendock St. George Tucker, C.S.
John Raynor Arthur, C.S.
* C. R. Ovans, C.S.
* John William Shaw Wyllie, C.S., C.S.I.
* Sir William Lockyer Merewether, K.C.S.I., C.B.
* Captain Edward Burnet Thomas Holland, R.E.
The Reverend Charles Durell DuPort, M.A.
W. C. Coles, M.D.
* G. R. Ballingall, M.D.
Francis James Candy, M.A.
Johann Georg Bühler, Ph.D.
* Captain W. C. Barker, I.N.
D. J. Kennelly, I.N., F.R.A.S.
The Honourable Andrew Richard Scoble, Q.C.
The Honourable John Philip Green, LL.B.
John Pares Bickersteth, M.A.
Robert Hannay.

---

* Deceased. † *Ex officio*; not gazetted.

William George Pedder, C.S., B.A.
William Heurtley Newnham, C.S., B.A.

1864.

* The Reverend James Aitken.
* T. C. Anstey.
F. F. Arbuthnot, C.S.
* Bhugwandas Purshotumdas.
* Colonel J. Barnes Dunsterville, C.S.I.
* Nicholas Fernandes.
Major-General J. G. Fife, R.E.
* William Hanbury, B.A.
Thomas Child Hayllar.
William Guyer Hunter, M.D., F.R.C.P.
T. B. Johnstone, M.D.
Major-General Sir Michael Kavanagh Kennedy, R.E., K.C.S.I.
* Lieut.-Colonel D. Nasmyth, R.E.
George Scott, C.S.
* Robert Sharpe Sinclair, M.A., LL.D.
* The Most Reverend Walter Steins, S.J., D.D.
Major-General Charles William Tremenheere, R.E., C.B.
* Venayekrao Jugonnathji Sunkersett.
The Honourable James Sewell White, B.A.
Major General Henry St. Clair Wilkins, R.E
Andrew Grant.
George Inverarity, C.S.

1865.

* The Reverend William Beynon.
Henry Coke, M.A.
* Captain Sherard Osborn, C.B., R.N.
F. S. Stedman.
* The Reverend J.V.S. Taylor, B.A.

1866.

* Rastamjee Jamsetjee Jeejeebhoy.

---

* Deceased.

George Foggo.
Alexander John Hunter.
F. Broughton, F.R.C.S.
H. S. Bellairs, M.A.
R. A. Dallas, LL.D.
W. J. Jefferson, M.A.
* Colonel William Kendall, R.E.
Franz Kielhorn, Ph.D.
J. T. Denison-Mackenzie, M.B., F.R.C.S.
Edward Hope Percival, C.S.
* J. R. Rushton, Mem. Inst. C.E.
The Rev. Trenham King Weatherhead, LL.B.

1867.

* The Honourable A. B. Warden, C.S.
* Colonel George Sligo A. Anderson.
The Reverend Dugald Cameron Boyd, M.A
Major Godfrey Clerk.
T. B. Curtis.
The Reverend A. Forbes, B.A.
Major Charles Thomas Haig, R.E.
R. Hamilton.
* C. F. Kelly, M.A.
The Venerable C. H. Leigh-Lye, M.A
* Krishna Shastri Chiplunkar.
Alexander Faulkner.
* A. M. Rogers.
C. Watts Russell, B.A.
* James Taylor.
* A. V. Ward.
* The Reverend G. A. F. Watson, M.A.
* M. H. Scott.
Francis Shortt Arnott, M.D., C.B.
N. A. Dalzell, M.A.
* The Honourable Narayan Vasudevji.
* The Rev. Duncan Macpherson, M.A., D.D.

---

* Deceased.

1868 (January).

A. Brown.
The Reverend C. I. Cameron, M.A.
W. Collum, M D
Lieut.-Colonel A. Davidson, R.E.
* Dhirajram Dalpatram, G.G.M.C.
* Dhirajlal Mathuradas.
William Draper, M.A.
* J. Dunbar, M A.
* Captain C. W. Finch, R.E.
A Gordon, M.D., C.B.
F. G. Joynt, M.D.
G S. Vesey FitzGerald.
J. Macpherson, B.A.
* Narayan Daji, G.G.M.C.
* J. O'Leary, B.A., S.C.L.
J. H. Sylvester, F.G.S., A.K.C.
Colonel J. S. Trevor, R.E., C.S.I.

1868 (December).

* S. A. DeCarvalho, G.G.M.C.
* John Connon, M.A.
W. S. Eccles.
The Reverend J. W. Gardner.
* Karsandas Mulji.
John Mills.
* The Reverend Robert Montgomery.
Commander G. T. Robinson, I.N.
T. W. Ward, F.R C.S.
The Reverend C. T. Wilson, M.A.
A. Wright.
The Honourable F. S. Chapman, C.S.
* A. F. Bellasis, C.S.

1869.

*†The Right Reverend Henry Douglas, D.D.
A. Campbell.

---

* Deceased. † *Ex officio*; not gazetted.

1870.

Lieut.-Colonel W. W. Anderson.
* The Reverend L. Bodoano.
R. M Brereton, Mem. Inst. C.E.
The Reverend A. Hazen, M.A.
Risley V. Hearn
The Honourable Francis Lloyd.
H. P. LeMesurier, Mem. Inst. C.E., C.S.I.,F.R.G.S.
T E. P. Martin.
Thomas Ormiston, Mem. Inst. C.E.
The Honourable Alexander Rogers, C.S.
The Reverend J. S. S. Robertson, F.R.G.S., M.R.A.S.
* Venayekrao Appa Saheb Kurandwadkar.
* The Reverend James Wallace.
F. R. S. Wyllie, C.S.
David Young, M.D.

1871

* W. H. Havelock, C.S.

1872.

* Rastamji Kavasji Bahadurji, G.G.M.C., M.R.C.S.
Major-General Jenkins Jones, R.E.
* Kahandas Mancharam.

1873.

* Lieut.-Colonel Bonar Deane.
W. W. Hamilton.
C J. Mayhew.
The Reverend J. Paton.
* E. Wilmot, M.A., LL.D.
* C. Currey (July).
W. Thom (Nov.)

1874.

Major T. F. Dowden, R.E.
F. Mathew, Mem. Inst. C.E.
G. T. Molecy.
* Rao Saheb Narayan Jagannath Vaidya.

---

* Deceased.

1875.

* Ghulam Mohidin.
* Rastamji Mervanji, G.G.M.C.

1876.

* Cowasji Manockji Limji.
The Rev. H. Depelchin, S.J., D.D.
* Bhairavnath Mangesh.
* Baron deHochepied Larpent, C.S.
* Rastamji Jamshedji Nadirshah, L.M.
* Andrew Lyon, M.A., C.S.
James M. Maclean.
W. Martin Wood.

1877.

The Honourable Colonel W. C. Anderson, C.S.I.
* A. M. C. Coutinho, G.G.M.C.

1879.

* The Honourable Morarji Gokaldas, C.I.E.
* L. G. Hynes.
* The Reverend E. deVos, S.J., S.T.P.
* Major C. Mant, R.E.

1880.

* A. H. Hughes, M.D., M.R.C.S., Eng.; L.R.C.P.E.,L.M.E.

---

* Deceased.

GRADUATES.*

M.A.

1865.

	College.†	Branch.
Ránáde, Mahádev Govind	E.	History.‡
Wágle, Bál Mangesh	E.	History and Political Economy.

1866.

Bápat, Janárdan Vináyak	E.	History and Philosophy.
Bhágvat, Govind Rámchandra.	D.	Mathematics and Natural Philosophy.
Bhándárkar, Rámkrishna Gopál	E. & D.	English and Sanskrit.
Dalvi, Dinánáth Atmárám	E.	Mathematics and Natural Philosophy.§
Páthak, Vithal Náráyan	F.G.A.	History and Philosophy.

1867.

Gazdar, Jamshedji Jivanji	E.	Mathematics and Natural Philosophy.‖

1868.

Páthak, Shápurji Hormasji	E.	Mathematics and Natural Philosophy.‖

Second Class.

Mánkar, Ganpatráo Amritráo.	D.	History and Philosophy.
Pandit, Shankar Pándurang	E.	English and Latin.
Patel, Dadábhái Sorábji	E.	History and Philosophy.
Pátel, Rastamji Mervánji	E.	Ditto.
Sayáni, Rahimtuláh Muhámmad.	E.	English and Latin.
Unválá, Jamshedji Navroji	E.	—Ditto.

1869.

First Class.

Bhat, Gangádhar Anant	D.	Mathematics and Natural Philosophy.

The names are arranged alphabetically according to the surname, in order of time.

† For the names of Colleges and Schools, see List of Abbreviations.

‡ With Honours and Gold Medal.

§ With Honours, Class III.

‖ With Honours, Class II

Second Class.

	College.	Branch.
Dádáchánji, Kershásji Rastamji.	E.	History and Philosophy.
Modı, Bamanjı Edaljı	E.	English and Latin.
Mehtá, Phirozsháh Mervánjı .	E.	History and Philosophy.

1870.

First Class.

Dalál, Jamshedji Ardesir . ..	E.	Mathematics and Natural Philosophy.
Desái, Ambálál Sákarlál	E.	English and Sanskrit.

Second Class.

Mehtá, Tápidás Dayárám	E.	Mathematics and Natural Philosophy.
Telang, Káshináth Trimbak .	E.	English and Sanskrit.

1871.

Second Class.

Bhábhá, Hormasji Jehángierji	E.	English and Latin.

1872.

Second Class.

Athalé, Yashvant Vásudev	E.	English and Sanskrit.
Modı, Barzorjı Edaljı	E.	English and Latin.
Tullu, Ráoji Vásudev.....	E.	English and Sanskrit.

1873.

Second Class.

Pendse, Káshináth Balvant	E.	English and Sanskrit.
Wádıá, Dosábhái Nasarvánji	E.	English and Latin.

1874.

Second Class.

Bhidé, Shivrám Parshurám.	D.	English and Sanskrit.
Kırloskar, Ganesh RámchandraD.		English and Latin.
Lad, Vıthal Bháu	E.	Natural Sciences.
Mahájane, Vıshnu Moreshvar ..	D.	English and Sanskrıt.

1875.

First Class.

Duncan, Thomas..... .	St. X.	English and Latin.

Second Class.

	College.	*Branch.*
McDermott, Michael	St. X.	English and Latin.

1876.

Second Class.

Jinsivále, Shridhar Ganesh	D.	History and Philosophy
Kángá, Dinsháh Pestanji	E.	English and Latin.
Kelkar, Dámodar Ganesh.....	D.	Ditto.
Tullu, Govind Vásudev	E.	Natural Sciences.

1877.

First Class.

Dastur, Fardunji Mancherji ...	E.	Mathematics and Natural Philosophy.
Gokhale, Vithal Vishnu	E.	Natural Sciences.

Second Class.

Ráo, Ganpat Sadáshiv	E.	English and Latin.

1878.

First Class.

Naegáumválá, Kávasji Dádábhái.	E.	Natural Sciences.

Second Class.

Dastur, Phiroze Hoshang.....	D.	English and Persian.

1879.

First Class.

Sánjaná, Kávasji Jamshedji.....	D.	Mathematics.

Second Class.

Kápadiá, Kaikhosru Kuvarji...	E.	Natural Sciences.

Pass.

Agase, Dhondo Hari	E.	Mathematics.

1880.

Second Class.

Apte, Váman Shivrám . . . ...D.		English and Sanskrit.
Desái, Máneklál Sákarlál .....E		Natural Sciences.

1881.

Second Class.

Wádiá, Frámji Rastamji .. ... E.		Natural Sciences.

Pass.

Joglekar, Krishnáji Mádhavráo	E.	Natural Sciences.

1882

Second Class.

Bhándárkar, Shridhar Rámkrishna	E.	English and Sanskrit.
Dastur, Dhanjisháh Hormasji ...	E	Natural Sciences.
Kángá, Sorábji Mánikji	St. X.	English and Persian.

Pass.

Agarkar, Gopál Ganesh..... ..	D.	History and Philosophy.
Málvi, Tribhuvandás Narrottamdás	St. X.	English and Latin.
Sanjáná, Mancherji Kharshedji	F.G.A.	Ditto.

B.A.

Name.	Second Language.	Selected Subjects.			College.
		1	2	3	
1862.					
Second Division.					
Modak, Váman Abáji	Maráthi ..	Physical Geography with its influence on History.	. .	. .	E.
1863.					
Second Division.					
Bedarkar, Khanderáo Chimanráo	Ditto .	Ditto ...	Logic & Moral Philosophy.	... .	E.
Madgávkar, Rámchandra Vishnu	Ditto	Ditto ..	Ditto		E.
Márphátiá, Nagindás Tulsidás	Gujaráthi .	Chemistry, Heat & Electricity.	Ditto ..	..	E
1864					
Second Division.					
Kotháre, Girdharlál Dayáldás	Ditto ...	Physical Geography, &c.	Dynamics & Hydrostatics.	..	E. & D.
Kunté, Mahádev Moreshvar	Maráthi .	Ditto .	Logic & Moral Philosophy.		F. G. A.

Modi, Kaikhosru Edalji . .	Gujaráthi .	Physical Geography, &c.	Ditto ...	.....	E.
Munshi, Mansukhlál Mugatlál	Ditto . .	Ditto .	Ditto .	. ..	E.
*Shroff, Hormasji Ratanji	Ditto ...	Chemistry, Heat & Electricity.	Ditto	.....	E.
1865.					
First Division.					
Panjábi, Chuharmall Kundanmall .	Persian ..	Optics & Astronomy.	Dynamics & Hydrostatics.	Analytical Geometry.	E.
Second Division.					
Bál, Keshav Bápuji	Maráthi ..	Political Economy.	Logic & Moral Philosophy.	Ditto ..	E.
Dátiyá, Motilál Rámprasád	Gujaráthi.	Physical Geography, &c	Ditto ...	History ...	E.
Ghásválá, Ardesir Frámji	Ditto ...	Ditto .	Ditto ...	Ditto ...	E.
Jatár, Shrirám Bhikáji	Maráthi .	Dynamics & Hydrostatics.	Ditto ...	Ditto ...	E.
Kohiyár, Ratansháh Eracsháh ..	Gujaráthi .	Physical Geography.	Ditto ...	Ditto ...	E.
Mehtá, Thákurdás Atmárám	Latin ...	Ditto ...	Ditto ..	Ditto ...	E.

*Passed M.A. Examination in History and Philosophy in 1864

Name.	Second Language.	Selected Subjects.			College.
1866.		1	2	3	
Second Division.					
Gádgil, Janárdan Sakhárám	Maráthi ...	Chemistry, Heat & Electricity.	Logic & Moral Philosophy.	History .	E.
Garud, Dhondu Shámráo	Sanskrit ...	Dynamics & Hydrostatics	Ditto ...	Analytical Geometry.	E.
Káne, Mahádev Vishnu	Ditto ...	Ditto ...	Optics & Astronomy.	Ditto .	E.
Náik, Balvant Sitárám	Maráthi ..	Ditto ...	Logic & Moral Philosophy.	Ditto ..	D.
Paránjapye, Shivrám Bápuji	Sanskrit ...	Ditto ..	Ditto ...	Ditto ...	D.
Thákur, Báláji Bábáji	Ditto . .	Political Economy.	Ditto ..	History ...	E.
Udás, Yashvant Anandráo	Ditto ...	Ditto ...	Ditto ..	Dynamics & Hydrostatics.	E.
1867.					
First Division.					
Párekh, Gokuldás Káhándás	Persian	Analytical Geometry.	Optics & Astronomy.	Ditto ...	E.

Second Division.					
Askhedkar, Lakshuman Yádav ..	Sanskrit .	Ditto .	Logic & Moral Philosophy.	Ditto .	E.
*Bennet, Hormasji Pestanji .	Latin ..	Political Economy.	Ditto .	History ..	E.
Bhojváni, Alumal Trikamdás . ..	Sindhi ...	Ditto ...	Ditto .	Analytical Geometry.	E.
Gimi, Dorábji Edalji	Gujaráthi .	Ditto ...	Ditto ..	Dynamics & Hydrostatics	E.
Godbolé, Káshináth Rámchandra .	Maráthi ...	Ditto ..	Analytical Geometry.	Ditto	D.
Kunte, Anná Moreshvar...	Sanskrit .	Ditto ...	Logic & Moral Philosophy.	Ditto ...	E.
Maráthe, Káshináth Bálkrishna ..	Ditto ...	Analytical Geometry.	Ditto .	Ditto	D.
Oka, Rámchandra Govind	Maráthi ...	Ditto ..	Optics & Astronomy.	Ditto .	D.
Sáthe, Náráyan Vináyak	Ditto	Ditto .	Ditto	Ditto	D.
Vakhárkar, Balvant Bhikáji	Ditto ...	Ditto ..	Logic & Moral Philosophy.	Ditto .	D.
1868.					
First Class.					
Apte, Mahádev Chimnáji ...	Ditto ..	Ditto .	Optics & Astronomy.	Ditto	D.
Deshmukh, Krishnaráo Gopál	Ditto	Ditto	Ditto ..	Ditto	D.
Patvardhan, Sitárám Vishvanáth	Ditto	Ditto	Ditto	Ditto .	E.

* Passed M A Examination in English and Latin, Class II, in 1867

Name.	Second Language.	Selected Subjects.			College.
Second Class.		1	2	3	
Bhátavadekar, Gajánan Krishna ...	Sanskrit ..	Political Economy.	Logic & Moral Philosophy.	History ...	E.
Bhedvár, Phirozsháh Dádábhái ...	Gujaráthi .	Analytical Geometry.	Optics & Astronomy.	Dynamics & Hydrostatics	D.
Chemburkar, Krishnaráo Antobá ...	Maráthi ...	Ditto ...	Ditto ...	Ditto ...	E.
Davlatjádá, Chandulál Mathurádás ...	Latin ...	Political Economy.	Logic & Moral Philosophy.	History ...	E.
Dhurandhar, Sadáshiv Vishvanáth ...	Maráthi ...	Ditto ...	Ditto ..	Chemistry, Heat & Electricity.	E.
Dubásh, Jamshedji Kharshedji... ...	Gujaráthi .	Analytical Geometry.	Optics & Astronomy.	Dynamics & Hydrostatics	E.
Káthavate, Abáji Vishnu	Sanskrit .	Ditto ...	Logic & Moral Philosophy.	Political Economy.	D.
Kher, Krishnáji Náráyan	Ditto ..	History ...	Ditto ...	Dynamics & Hydrostatics	E.
Madgávkar, Dinánáth Vishnu	Ditto ..	Ditto ...	Ditto ...	Political Economy.	E.

Nádkarni, Ghanashám Nilkant	Ditto	Analytical Geometry.	Ditto ...	Ditto ...	E.
Nánávati, Mánikji Nasarvánji	Latin ..	History ...	Ditto ...	Ditto ...	E.
Nánávati, Nágardás Narottamdás ...	Ditto ..	Ditto ...	Ditto ...	Ditto ...	E.
Pádhye, Hari Gopál	Sanskrit ...	Analytical Geometry.	Ditto .	Ditto ...	D.
Phadké, Narhar Gadádhar	Maráthi ...	Ditto ...	Optics & Astronomy.	Dynamics & Hydrostatics	D.
Soman, Vásudev Gopál	Sanskrit...	Political Economy.	Logic & Moral Philosophy.	Ditto ...	E.
Thákur, Shripád Bábáji	Greek ..	Analytical Geometry.	Optics & Astronomy.	Ditto ...	E.
Vikáji, Frámji Rastamji...	Gujaráthi .	Physiology ..	Logic & Moral Philosophy.	Political Economy.	E.
1869.					
Second Class.					
Jatár, Dámodar Bhikáji	Maráthi ...	Analytical Geometry.	Optics & Astronomy.	Dynamics & Hydrostatics	D.
Talyárkhán, Mánekshah Jehángiershah,	Latin ...	Chemistry, Heat, and Electricity.	Logic & Moral Philosophy.	Ditto ...	E.

Name.	Second Language.	Selected Subjects.			College.
1870.		1	2	3	
Second Class.					
Ajgávkar, Achyut Náráyan	Sanskrit ...	Optics & Astronomy.	Dynamics & Hydrostatics	Analytical Geometry.	D.
Angal, Rámchandra Govind	Maráthi ...	Logic & Moral Philosophy.	Ditto ...	Ditto ...	D.
Barvê, Anandráo Sakhárám	Ditto ...	Ditto ...	Political Economy.	History ..	F.G.A.
Chitnis, Sábájiráo Chintáman	Sanskrit ..	Ditto ...	Ditto ...	Dynamics & Hydrostatics	E.
Deshmukh, Rámchandra Gopál... ..	Ditto ...	Ditto ..	Ditto ...	Analytical Geometry.	D.
Jahágirdár, Dáyábhái Motirám ..	Latin ..	Dynamics & Hydrostatics	Ditto ...	Ditto ...	E.
Joshi, Ganesh Parashurám	Sanskrit ...	Ditto ...	Ditto ...	Ditto ...	D.
Keskar, Hari Bhagvant...	Maráthi ...	Logic & Moral Philosophy.	Ditto ...	History. ...	E.
Khandálávalá, Navroji Dorábji ..	Gujaráthi .	Ditto ...	Ditto ...	Dynamics & Hydrostatics	D.
Kolá, Barzorji Jamshedji	Latin ...	Optics & Astronomy.	Analytical Geometry.	Ditto ..	E.

Kotháre, Anandráo Krishnaráo ..	Ditto	Logic & Moral Philosophy .	Political Economy.	Ditto .	E.
Láiválá, Ghelábhái Máneklál ...	Sanskrit .	Ditto .	Analytical Geometry.	Ditto	E.
Nánávati, Dáyábhai Harjivandás .	Latin ...	Dynamics & Hydrostatics.	Ditto ...	Political Economy.	E.
Patvardhan, Vináyak Rámchandra ...	Sanskrit ..	Logic & Moral Philosophy.	Political Economy.	Analytical Geometry.	D.
Patel, Behrámji Frámji	Latin .	Ditto ...	Dynamics & Hydrostatics.	Political Economy.	E.
Patel, Mancherji Frámji	Gujaráthi .	Optics & Astronomy	Ditto ..	Analytical Geometry.	E.
Sáne, Báláji Bápuji	Maráthi ..	Ditto ...	Ditto .	Ditto	E.
Taláti, Edalji Dorábji	Latin ...	Logic & Moral Philosophy.	Ditto ..	Political Economy.	E.
1871.					
Second Class.					
*Aitken, Edward Hamilton	Ditto ..	Political Economy.	Chemistry, Heat and Electricity.	Dynamics & Hydrostatics	D.
Bhat, Chintáman Náráyan	Ditto ..	Ditto .	Logic & Moral Philosophy.	Analytical Geometry.	D.

* Passed the M.A. Examination in English and Latin in 1872.

Name.	Second Language.	Selected Subjects.			College.
		1	2	3	
Bhat, Gopál Anant	Sanskrit ...	Political Economy.	Analytical Geometry.	Dynamics & Hydrostatics.	D.
Bhátavadekar, Vináyak Rámchandra	Maráthi ...	Optics & Astronomy.	Ditto ...	Ditto ...	D.
Contractor, Bámanji Phirozsháh ...	Latin ...	Political Economy.	History ...	Logic & Moral Philosophy.	D.
Kabe, Gopál Venkáji	Ditto ...	Ditto ..	Analytical Geometry.	Ditto ...	E.
Kolatkar, Lakshuman Shivrám ...	Sanskrit ...	Ditto ...	Ditto ...	Ditto ...	D.
Majámundár, Ishvarrái Lakshmanrái ...	Ditto ...	Ditto ..	Ditto ..	Dynamics & Hydrostatics.	E.
Modak, Janárdan Báláji	Ditto ...	Ditto ..	Ditto .	Ditto ..	D.
Ránáde, Govind Krishna	Maráthi ...	Ditto ...	Logic & Moral Philosophy.	Analytical Geometry .	E.
Sayáni, Ibráhim Muhámmad	Latin ...	Ditto ...	Ditto ..	Dynamics & Hydrostatics.	E.
Talvalkar, Raghunáth Bálkrishna ...	Sanakrit ...	Ditto ..	Analytical Geometry.	Ditto ..	D.

1872.					
Second Class.					
Bhánap, Gopál Vináyak	Ditto	Ditto ...	Logic & Moral Philosophy.	History ...	D.
Chiplunkar, Vishnu Krishna	Ditto ...	Ditto .	Ditto .	Ditto ...	D.
Dhairyaván, Vásudev Krishnaráo ...	Ditto ..	Ditto ...	Ditto ...	Differential & Integral Calculus.	E.
Jámaspásá, Frámji Mancherji	Ditto ...	Ditto ...	Dynamics & Hydrostatics.	Analytical Geometry.	E.
Kirtane, Keshav Váman...	Ditto ...	Ditto ...	Logic & Moral Philosophy.	History ...	D.
Kirtikar, Janárdan Sundarji	Ditto ...	Ditto ...	Ditto ...	Ditto ...	St. X.
Limaye, Ganpat Venkatesh	Ditto ...	Ditto ...	Ditto ...	Analytical Geometry.	D.
Mirzá, Sádikáli Fraidun	Arabic ..	Ditto ...	Ditto ...	Dynamics & Hydrostatics.	E.
O'Shaughnessy, Simon	Latin ...	Ditto ...	Ditto ...	History ...	St. X
Thakár, Ganesh Pándurang	Sanskrit .	Ditto ...	Differential & Integral Calculus.	Analytical Geometry.	D.
1873.					
Second Class.					
Bhándárkar, Shivrám Vithal	Ditto	Ditto . .	Chemical Physics.	Inorganic Chemistry.	E.

Name.	Second Language.	Selected Subjects.			College.
		1	2	3	
Cámá, Mervánji Mancherji	Latin ...	Logic& Moral Philosophy.	Political Economy.	Dynamics & Hydrostatics	E.
Dádi-Barjorná, Frámji Navroji ..	Ditto ..	Optics & Astronomy.	Analytical Geometry .	Ditto ..	E.
DeMonte, Thomas Antonio	Ditto ..	History ...	Ditto ..	Logic& Moral Philosophy.	St. X.
Ghárpure, Dámodar Govind	Sanskrit ...	Ditto ..	Political Economy.	Ditto ...	D.
Gokhale, Rámchandra Vishnu	Ditto ...	Analytical Geometry.	Ditto ...	Ditto ...	E.
Inámdár, Venkatráo Rukmángad ...	Ditto ...	Ditto .	Ditto ...	Ditto ...	F. G. A.
Jambusariá, Bejanji Mánekji	Latin ...	Dynamics & Hydrostatics	Ditto ..	Chemical Physics.	E.
Joshi, Ganesh Venkatesh	Sanskrit ..	History ...	Ditto ...	Logic& Moral Philosophy.	E.
Karmarkar, Vithal Bápuji	Ditto ..	Differential & Integral Calculus.	Ditto ...	Ditto ..	E.
Khambátá, Jehángier Kaikhosru ...	Latin ..	History ...	Ditto ...	Ditto .	E.
Khárkar, Bápuji Mahipat	Ditto .	Differential & Integral Calculus.	Ditto . .	Ditto	E.

Kirloskar, Sakhárám Ramchandra ..	Sanskrit	Analytical Geometry.	Ditto .	Ditto	D.
Kunte, Vishnu Keshav	Ditto	History ..	Ditto ...	Ditto	D.
Pandit, Vináyak Mahádev	Ditto .	Ditto ...	Ditto ...	Ditto	D.
Patvardhan, Keshav Vishvanáth ..	Ditto .	Analytical Geometry.	Ditto ..	Dynamics & Hydrostatics.	E.
Ránádé, Shankar Moro	Ditto .	Ditto ...	Ditto ...	Differential & Integral Calculus.	D.
Sáné, Govind Gangádhar	Ditto .	Ditto ...	Ditto ..	Dynamics & Hydrostatics.	D.
Sáné, Káshináth Náráyan ..	Ditto ..	History ...	Ditto ...	Logic & Moral Philosophy.	D.
Tárápurválá, Fardunji Kuvarji .	Latin .	Analytical Geometry.	Ditto ...	Differential & Integral Calculus.	D.
1874.					
First Class.					
Apte, Ganesh Krishna	Sanskrit	Differential & Integral Calculus.	Analytical Geometry.	Optics & Astronomy.	D.
Second Class.					
Alpaiválá, Dádábhái Jamshedji .	Latin .	Political Economy.	Ditto .	Dynamics & Hydrostatics.	E.

Name.	Second Language	Selected Subjects.			College.
		1	2	3	
Dalál, Hirálál Narottamdás ...	Latin ...	Political Economy.	Analytical Geometry.	Dynamics & Hydrostatics.	E.
Deshmukh, Raghunáth Gopál	Sanskrit ..	Ditto ...	History	Differential & Integral Calculus.	D.
Gádgil, Pándurang Dhonddev	Ditto ..	Ditto ..	Analytical Geometry.	Ditto ..	E.
Godbole, Náráyan Bálkrishna	Ditto ...	Ditto ..	Ditto ..	Ditto ...	E.
Jog, Pralhád Náráyan	Ditto ...	Logic & Moral Philosophy.	Ditto ...	Chemical Physics.	E.
Joshi, Balvant Náráyan	Ditto ...	Ditto	Political Economy.	History.	D.
Joshi, Bháskar Shridhar	Ditto ..	Differential & Integral Calculus.	Ditto ..	Ditto ...	E. & St. X.
Kangá, Jamshedji Behrámji	Latin ..	Logic & Moral Philosophy.	Ditto ..	Dynamics & Hydrostatics	E.
Kelkar, Káshináth Ganesh ...	Sanskrit .	Analytical Geometry.	Ditto	Ditto ...	D.
Khándekar, Govind Rámchandra .	Ditto ..	Ditto ...	Ditto ...	Differential & Integral Calculus.	E.

Mahisálkar, Vithal Rámchandra ...	Ditto ..	Ditto ...	Dynamics & Hydrostatics.	Ditto ...	D.
Nábar, Báji Náráyan	Ditto ...	Logic & Moral Philosophy.	Political Economy.	Chemical Physics.	E.
Páthak, Pestanji Hormasji	Latin ...	Differential & Integral Calculus.	Ditto ...	Analytical Geometry.	E.
Phadké, Vishnu Vásudev	Sanskrit ...	History ..	Ditto ...	Ditto ...	D.
Prabhákar, Anandráo Sitárám	Latin ...	Logic & Moral Philosophy.	Ditto ...	Dynamics & Hydrostatics.	St. X.
Sahasrabudhe, Balvant Rámchandra ...	Sanskrit ...	Analytical Geometry.	Ditto ...	History ...	D.
Wágle, Bhagvant Mangesh	Ditto ...	Ditto ...	Ditto ...	Logic & Moral Philosophy.	E.

1875.

First Class.

Bhat, Harirám Uttamrám	Sanskrit ...	Political Economy.	Analytical Geometry.	Differential & Integral Calculus.	E.
DeSa, Luis	Latin ...	Ditto ..	Ditto ...	Logic & Moral Philosophy.	St. X.

Name.	Second Language.	Selected Subjects.			College.
		1	2	3	
Kshirságar, Govind Náráyan	Persian ...	Dynamics & Hydrostatics.	Political Economy.	Optics & Astronomy.	D.
Modi, Jehángier Edalji	Latin ..	History	Ditto ...	Logic & Moral Philosophy.	E.
Second Class.					
Agáse, Ganesh Janárdan	Sanskrit ..	Ditto ...	Ditto ...	Ditto ..	D.
Ajinkia, Sitánáth Gopináth	Latin ...	Ditto ...	Ditto ..	Ditto	D.
Bhandupválá, Dorábji Hormasji ...	Ditto ..	Differential & Integral Calculus.	Ditto ..	Chemical Physics.	E.
Chhatré, Náráyan Viináyak	Ditto .	Dynamics & Hydrostatics	Ditto	Optics & Astronomy.	D.
Desái, Navroji Palanji	Ditto .	History	Ditto ..	Logic & Moral Philosophy.	E.
DeSouza, Luis ...	Ditto	Ditto	Analytical Geometry.	Ditto	St. X

Dhárap, Náráyan Krishna .. .	Sanskrit ...	Dynamics & Hydrostatics	Differential & Integral Calculus.	Optics & Astronomy.	D.
Gunjikar, Ganesh Bhikáji	Hebrew .	Political Economy.	Ditto	Analytical Geometry.	F. G. A.
Hasabnis, Govind Moreshvar	Sanskrit...	Ditto ...	Ditto .	Ditto ...	D.
Huligolkar, Krishnaráo Mádhav .	Ditto ..	Ditto .	Logic & Moral Philosophy.	Dynamics & Hydrostatics	D.
Indápurkar, Váman Gopál	Persian ...	Ditto ..	History ..	Ditto ..	D.
Karandikar, Ráoji Báláji	Sanskrit ..	Ditto ..	Analytical Geometry.	Differential & Integral Calculus.	D.
Kavthekar, Vithal Lakshuman	Latin ..	Ditto ..	Dynamics & Hydrostatics	Ditto ...	D.
Kharégát, Mervánji Pestanji	Ditto ..	Analytical Geometry.	Ditto ...	Ditto ...	E.
Kirtikar, Vithal Khanderáo	Sanskrit ..	Ditto .	Logic & Moral Philosophy.	Political Economy.	E.
Limayé, Hari Váman	Ditto ..	Ditto .	Differential & Integral Calculus.	Ditto ..	E.
Mudle, Krishnáji Sadáshiv	Ditto ..	Logic & Moral Philosophy.	Chemical Physics	Ditto ..	E.
Páudvál, Dvárkánáth Sakhárámji ..	Ditto ..	Ditto ..	History .	Ditto ..	E.
Sáthe, Gopál Moreshvar	Ditto ..	Ditto ..	Analytical Geometry.	Ditto ..	E.

Name.	Second Language	Selected Subjects.			College
		1	2	3	
Tipnis, Raghunáth Shivrám	Sanskrit ...	Dynamics & Hydrostatics.	Analytical Geometry.	Differential & Integral Calculus.	E.
Vasváni, Tekchand Udhavdás . .	Persian	Political Economy.	Logic & Moral Philosophy.	Dynamics & Hydrostatics.	E
Wadiá, Mervánji Nasarvánji	Latin ..	Ditto	Ditto .	History	E.
1876.					
First Class.					
Dalál, Tribhuvandás Lakshumidás ...	Sanskrit	Differential & Integral Calculus.	Dynamics & Hydrostatics	Analytical Geometry.	E.
Second Class.					
Atre, Anáji Rámchandra	Ditto .	Political Economy.	Ditto	History	D.
Bhat, Dámodar Dinánáth	Ditto	Ditto	Ditto	Logic & Moral Philosophy.	E.

Chhatre, Nilkant Vináyak	Ditto	Differential & Integral Calculus.	Chemical Physics.	Inorganic Chemistry.	D
Chiplunkar, Lakshuman Krishna ...	Latin ...	Dynamics & Hydrostatics.	Ditto ...	History ...	D. & F.G.A.
Dalál, Adarji Mancherji	Persian ...	Political Economy.	Ditto ...	Ditto ...	E.
Desái, Khandubhái Indraji	Sanskrit ...	Dynamics & Hydrostatics.	Ditto ...	Inorganic Chemistry.	E.
Gándhi, Jiváji Dinsháhji	Latin ..	Logic & Moral Philosophy.	Political Economy.	History ...	E.
Hogan, Daniel Frederick	Ditto ...	Ditto ..	Analytical Geometry.	Chemical Physics.	St. X.
Koparkar, Govind Bálkrishna	Ditto ...	Ditto ...	Political Economy.	History ...	E.
*Maráthe, Krishnáji Sadáshiv	Sanskrit ...	Ditto ...	Ditto ..	Ditto ...	D.
Ovalekar, Moreshvar Náráyan	Latin ...	Ditto ..	Ditto ...	Ditto ...	E.
Romanini, Rinaldo	Ditto ...	Ditto ..	Chemical Physics.	Analytical Geometry.	St. X.
Sovani, Ganesh Krishna...	Sanskrit ...	Differential & Integral Calculus.	Dynamics & Hydrostatics.	Ditto ...	E.
Tripáthi, Govardhan Mádhavrám ...	Ditto ..	Logic & Moral Philosophy.	Political Economy.	History ..	E.
Upásani, Shridhar Bálkrishna	Ditto ...	Ditto ...	Ditto ...	Ditto ...	D.

* Passed the M.A. Examination in History and Philosophy in 1877.

Name.	Second Language	Selected Subjects.			College.
1877.		1	2	3	
First Class.					
Bhándárkar, Vásudev Gopál .	Latin ..	History	Logic & Moral Philosophy.	Political Economy.	E.
Chandávadkar, Náráyan Ganesh . .	Sanskrit .	Ditto ...	Ditto .	Ditto ...	E.
Desái, Mádhavlál Harilál	Ditto ...	Ditto ..	Dynamics & Hydrostatics.	Ditto .	E.
Gokhale, Krishnáji Vishnu	Latin ..	Dynamics & Hydrostatics.	Analytical Geometry.	Differential & Integral Calculus.	E.
Jámbhekar, Gangádhar Bhimráo ..	Sanskrit .	Logic & Moral Philosophy.	History .	Political Economy.	D.
Kángá, Fardunji Mánikji ...	Latin	Ditto	Chemical Physics.	Inorganic Chemistry.	St. X.
Káthavate, Manohar Vishnu	Ditto	Ditto	History	Political Economy.	E.

Mullá, Faizullábhái Lukmánji	Arabic ...	Dynamics & Hydrostatics.	Analytical Geometry.	Differential & Integral Calculus.	E.
Pávgi, Ráoji Bhavánráo	Sanskrit ...	Political Economy.	Dynamics & Hydrostatics.	Ditto ...	E.
Tilak, Bál Gangádhar	Ditto ...	Dynamics & Hydrostatics.	Analytical Geometry.	Ditto ...	D.
Second Class.					
Abdullatif, Kamrudin Amrudin ...	Persian ...	History ...	Political Economy.	Chemical Physics.	E.
Bhátavadekar, Vishnu Krishna ..	Sanskrit ...	Ditto ...	Ditto ...	Logic& Moral Philosophy.	E.
Chavbal, Rámchandra Shridhar ..	Ditto ...	Ditto ...	Ditto ...	Ditto ...	D.
Desái, Fardunji Pálanji	Persian ...	Differential & Integral Calculus.	Analytical Geometry.	Dynamics & Hydrostatics.	E.
Desái, Sákarlál Durgárám	Sanskrit ...	History ...	Logic& Moral Philosophy.	Political Economy.	E.
Deshmukh, Lakshuman Gopálráo ...	Ditto ...	Ditto ...	Ditto ...	Ditto ...	E.
Enti, Barjorji Ardesir	Persian ...	Chemical Physics.	Physiology...	Ditto ...	E.
Gimi, Rastamji Mancherji	Latin ...	Political Economy.	Differential & Integral Calculus.	Chemical Physics.	E.

Name.	Second Language.	Selected Subjects.			College.
		1	2	3	
Godbolé, Hari Ganesh	Sanskrit ...	Political Economy.	Logic& Moral Philosophy.	History ...	D.
Golé, Siddheshvar Bháskar	Ditto ...	Ditto ..	Ditto ..	Ditto ...	D.
Kánitkar, Govind Vásudev	Ditto ...	Logic& Moral Philosophy.	Political Economy.	Chemical Physics.	E.
Khimjiáni, Fázal Manji	Latin ...	History ...	Logic& Moral Philosophy.	Political Economy.	E.
Kotháre, Gajánan Bápuji	Persian ...	Differential & Integral Calculus.	Ditto ...	Ditto ...	E.
McAfee, Frank L.	Latin ..	Logic& Moral Philosophy.	Political Economy.	History ...	E.
Mirzá, Abbas Ali Beg	Persian ...	Political Economy.	Chemical Physics.	Inorganic Chemistry,	F.G.A.
Modi, Jivanji Jamshedji . ..	Ditto ..	Ditto ..	Ditto ..	Ditto ..	E.
Padamji, Godrásji Dorábji	Latin ...	Dynamics & Hydrostatics.	Ditto ...	Ditto ...	D.
Pajnigará, Navroji Mervánji	Persian ...	History ...	Ditto ...	Ditto ...	F.G.A.

Pandit, Ganesh Gopál	Sanskrit ...	Logic& Moral Philosophy.	Dynamics & Hydrostatics.	Political Economy.	E.
Pandit, Ghanashám Náráyan	Ditto ...	History ...	Political Economy.	Chemical Physics.	E.
Rele, Gangárám Bápsobá	Ditto ...	Ditto ..	Ditto ...	Logic& Moral Philosophy.	E.
Rohankhedkar, Hari-Rámchandra ...	Ditto ...	Ditto ...	Ditto ...	Dynamics & Hydrostatics	D.
Rowe, Paul Valentine	Latin ...	Analytical Geometry.	Chemical Physics.	Inorganic Chemistry.	St. X
Váchá, Mánikji Shápurji	Persian ...	History ...	Logic& Moral Philosophy.	Political Economy.	E.
Vyás, Dhirajrám Vishvanáth	Sanskrit ...	Chemical Physics.	Ditto ...	Ditto ...	E.
Wágle, Shivrám Sitárám	Latin ...	Ditto ...	Ditto ...	Analytical Geometry	St. X
First Class.					
Vaidya, Shridharráo Vithal	Sanskrit ...	Dynamics & Hydrostatics.	Analytical Geometry.	Differential & Integral Calculus.	E.

Name.	Second Language.	Selected Subjects.			College.
1878.		1	2	3	
Second Class.					
Bhadbhade, Raghunáth Gangádhar ...	Sanskrit ...	Political Economy.	Chemical Physics.	Inorganic Chemistry.	E.
Bhágvat, Dattátraya Vishnu	Ditto ..	Ditto ...	Analytical Geometry.	History ...	D.
Dharamshi, Abdullá Meráli	Persian ...	Ditto ...	Ditto ...	Ditto ...	E.
Dhruva, Harilál Harsadrái	Sanskrit ...	Ditto ...	Chemical Physics.	Inorganic Chemistry.	E.
Kháparde, Ganesh Shrikrishna... ...	Ditto ...	Ditto ...	Logic& Moral Philosophy.	History ...	E.
Kharé, Dáji Abáji	Ditto ...	Analytical Geometry.	Dynamics & Hydrostatics.	Differential & Integral Calculus.	D.
Kirtane, Moro Váman	Latin ..	Logic& Moral Philosophy.	Political Economy.	History ..	D
Mudholkar, Rangnáth Narsinh	Sanskrit ...	Ditto ...	Ditto ...	Ditto ...	F
Sethná, Kávasji Bejanji	Ditto ...	Chemical Physics.	Inorganic Chemistry.	Physiology...	E
Sethná, Rastamji Dhanjibhái	Ditto ...	Ditto ..	Ditto ...	Ditto ...	E
Shaháni, Dayárám Gidumal	Persian ...	Logic& Moral Philosophy.	Political Economy.	History ...	E

Pass.					
Bengeri, Rághavendra Pándurang ..	Sanskrit ..	Dynamics & Hydrostatics	Ditto ..	Ditto .	E. & D.
Contractor, Kharshedji Nasarvánji ...	Persian ...	Physiology ..	Political Economy.	History ...	E.
Dalál, Rastamji Mancherji	Latin .	Ditto ...	Chemical Physics.	Inorganic Chemistry.	E.
Dalvi, Sitárám Yashvant	Sanskrit...	Logic&Moral Philosophy.	Political Economy.	Differential & Integral Calculus.	D. & F. G. A.
Damniá, Gulábchand Motichand ...	Latin ...	Ditto ...	Ditto ...	History ...	E.
Gandhe, Lakshuman Ganesh	Sanskrit ..	Ditto ...	Ditto ...	Ditto ...	D.
Gokhale, Gopál Rámchandra	Ditto ...	Differential & Integral Calculus.	Analytical Geometry.	Ditto ...	E.
Joshi, Sakhárám Vásudev	Ditto ...	Ditto ...	Ditto ...	Dynamics & Hydrostatics	F. G. A.
Kelkar, Govind Náráyan	Ditto ...	Ditto ..	Ditto ..	Optics & Astronomy.	D.
Master, Frámji Bamanji...	Latin ...	Ditto ..	Logic& Moral Philosophy.	Political Economy.	E.
Master, Sorábji Ratanji	Persian ...	Analytical Geometry	Dynamics & Hydrostatics	Chemical Physics.	E.

Name.	Second Language.	Selected Subjects.			College.
		1	2	3	
Mulye, Krishnáji Vásudev	Sanskrit...	Logic& Moral Philosophy.	Political Economy.	History ..	E. & D.
Munshi, Motilál Mugatlál	Latin ...	Physiology...	Ditto ..	Ditto ...	E.
Páthak, Kàshináth Bápu	Sanskrit...	Logic& Moral Philosophy.	Ditto ...	Ditto ...	D.
Sabnis, Raghunáth Venkáji	Ditto ...	Chemical Physics.	Ditto ...	Inorganic Chemistry.	E.
Sárangpáni, Krishnáji Vináyak ...	Ditto ...	Logic& Moral Philosophy.	Ditto .	History ...	E. & D.
Támbe, Yashvant Ballál	Ditto .	Differential & Integral Calculus.	Analytical Geometry.	Dynamics & Hydrostatics.	E. & F.G.A.
Vád, Ganesh Chimnáji	Ditto .	Ditto .	Ditto ..	Ditto ..	D

1879

First Class.

Shanahan, Henry Frank	Latin ...	Language and Literature	St. X.

Second Class.

Akhund, Ali Muhámmad Hasan Ali ...	Persian ...	History and Political Economy ...	E.
Bápat, Shankar Bhálchandra	Sanskrit ...	Logic and Moral Philosophy	D.
Bharuchá, Hormasji Kerbádji	Persian ...	Mathematics	E.
Dave, Vithalji Keshavji	Sanskrit ..	Logic and Moral Philosophy	E.
Desái, Kanthadji Kalliánji	Ditto ...	History and Political Economy ...	E. & D.
Divekar, Balvant Abáji	Ditto ...	Language and Literature	E.
Dunn, Michael	Latin ...	Ditto ditto	St. X.
Jathár, Bháskar Yashvant	Sanskrit ...	Logic and Moral Philosophy	D.
Joshi, Vishnu Ráoji	Latin ...	Mathematics	D.
Mirajkar, Rághvendra Shrinivás ...	Persian ...	History and Political Economy ...	D.
Modi, Jijibhái Edalji	Latin ...	Ditto ditto	E. & St. X.
Munshi, Dádábhái Kharshedji	Persian ...	Mathematics	E.
Nádkarni, Shivrám Sadáshiv	Sanskrit ...	Ditto	E.
Pandiá, Krishnashankar Hiráshankar...	Ditto ...	Ditto	E.
Ráhurkar, Váman Náráyan	Latin ...	Ditto	E.
Shukla, Devdat Dhaneshvar	Sanskrit ...	Ditto	E.
Trivedi, Kamaláshankar Pránshankar...	Ditto ...	History and Political Economy ...	E.

* Passed M.A. Examination of 1879 in Second Class, Branch I., Languages, English and Latin.

Name.	Second Language	Selected Subjects.	College.
Pass.			
Apte, Mahádev Shivrám	Sanskrit ...	History and Political Economy... ...	D.
Barve, Hari Mahádev	Ditto ...	Ditto ditto	E.
Chavbal, Mahádev Bháskar	Latin ...	Ditto ditto	D.
Dave, Ratirám Durgárám	Sanskrit ...	Ditto ditto	E.
Digámbar, Dálayá	Hebrew ..	Logic and Moral Philosophy	F. G. A.
Doctor, Nánábhái Behrámji	Persian ...	Natural Sciences	E.
Godbole, Purshottam Vishnu	Sanskrit ...	Mathematics	E.
Kápadiá, Dámodar Manji	Latin ...	History and Political Economy	E.
Khot, Anant Venkáji	Hebrew ..	Natural Sciences	E.
Manerikar, Ganesh Sadáshiv	Sanskrit ...	Logic and Moral Philosophy	E.
Masání, Nasarvánji Kávasji	Persian	History and Political Economy .. .	F. G. A.
Mehtá, Vaikunthrám Manmathrám ...	Sanskrit ...	Ditto ditto	E.
Nárimán, Dorábji Kharshedji	Latin ...	Ditto ditto	E.
Nátu, Káshináth Gangádhar	Sanskrit .	Language and Literature	E.
Natu, Trimbak Gangádhar	Ditto ..	Ditto ditto	E.
Pathak, Pándurang Shridhar	Ditto .	Mathematics	E.
Samarth, Vásudev Mahádev	Latin .	Logic and Moral Philosophy	D. & E.
Vaidya, Bálkrishna Náráyan	Ditto ...	Ditto ditto .	E.
Vámá, Hoshangji Barjorji ..	Persian ...	History and Political Economy. . ..	E.
Wágle, Mahádev Govind	Sanskrit ...	Mathematics .. .	E.

1880.

Second Class.

Cámá, Rustam Kharshedji	Latin ...	History and Political Economy... .	St. X.
Chitnis, Dattárám Balvant	Sanskrit ..	Ditto ditto	E.
Dáruválá, Jamshedji Edalji	Persian ...	Mathematics	F. G. A.
Dave, Kevalrám Mávji	Sanskrit ...	History and Political Economy... ..	E.
Deshpánde, Lakshuman Moreshvar ...	Ditto ..	Logic and Moral Philosophy	E. & D.
Dravid, Venkatesh Krishna	Ditto ..	Mathematics	D.
Dvivedi, Manilál Nabhubhái	Ditto ...	History and Political Economy... .	E.
Gadiáli, Pestanji Mancherji	Persian ...	Natural Sciences	E.
Gomes, Lewis	Latin ...	History and Political Economy... .	St. X.
Jamádár, Yusafáli Yákubáli	Persian ..	Ditto ditto ...	E.
Javeri, Bálábhái Manchárám	Ditto ..	Logic and Moral Philosophy	E.
Karandikar, Bálkrishna Parshurám ...	Sanskrit ...	Ditto ditto	E.
Karandikar, Venkatesh Balvant ..	Ditto ...	Mathematics	D.
Mistri, Jijibhái Pestanji..	Persian ...	History and Political Economy... .	St. X.
Muzumdár, Nandkrishnalál Ratanlál ..	Sanskrit ...	Ditto ditto	E.
Nagarkar, Rámchandra Dáji	Latin ...	Ditto ditto	E. & D.
Nánjiáni, Karamáli Rahim	Persian ..	Mathematics	E.
Phátak, Náráyan Gopál	Sanskrit.	History and Political Economy... ...	E.
Sahasrabudhe, Ganpat Bábji	Persian ...	Mathematics	D.
Sanjáná, Temulji Navroji	Ditto ..	History and Political Economy... ..	St. X.
Sovani, Vináyak Krishnáji	Sanskrit ...	Mathematics	E.

Pass.

Agáse, Keshav Janárdan	Ditto ...	History and Political Economy .. .	D.
Bhágvat, Báláji Abáji	Ditto ..	Ditto ditto	D.

Name.	Second Language.	Selected Subjects.	College.
Dáli, Raghunáth Sakhárám	Sanskrit ..	Language and Literature...	E.
Dave, Shivshankar Tuljáshankar ...	Ditto ..	History and Political Economy... ...	F. G. A.
Deshpánde, Rámchandra Náráyan ...	Ditto ..	Language and Literature...	E.
Divigikar, Rámráo Venkáji	Ditto ...	History and Political Economy	St. X.
Engineer, Kaikhosru Nasarvánji ..	Persian ..	Ditto ditto	E.
Gokhale, Vishvanáth Ballál	Sanskrit ..	Ditto ditto	E.
Joglekar, Rámchandra Ráoji	Ditto ...	Mathematics	D. & E.
Káká, Navroji Behrámji	Persian ..	Ditto	E.
Kumthekar, Mahádev Keshav	Sanskrit ...	Language and Literature	E.
Mánkar, Náráyan Lakshuman	Ditto ...	Ditto ditto	St. X.
Modi, Chhaganlál Thákurdás	Ditto ...	Mathematics	E.
Munshi, Nasarvánji Pestanji	Persian ...	History and Political Economy	E.
Parádkar, Vishnu Anant	Sanskrit ...	Ditto ditto	F. G. A.
Parchure, Váman Bhikáji	Ditto ...	Mathematics	E.
Phadke, Rámchandra Dinkár	Ditto ...	History and Political Economy... ...	E.
Sáthe, Moreshvar Anant	Ditto ...	Ditto ditto	D.
Sattáválá, Motilál Tribhuvandás ...	Ditto ...	Ditto ditto	F. G. A.
Sethná, Pestanji Kuvarji	Persian ...	Logic and Moral Philosophy	E.
Vakil, Manchersháh Jivanrám	Sanskrit...	Ditto ditto	E.
Wádiá, Hirji Pestanji	Latin ...	History and Political Economy... ...	St. X.
Wells, Devji Brijlál	Ditto ..	Ditto ditto	F. G. A.

1881.

First Class.

Athavalé, Rámkrishna Sakhárám	Sanskrit ...	Mathematics	E.
Vaidya, Chintáman Vináyak	Ditto ...	Ditto	E.

Second Class.

Divâtiá, Narsingráo Bholánáth	Ditto ...	Language and Literature	E.
Dolé, Mahádev Yashvant	Ditto ...	Mathematics	D.
Gole, Mahádev Shivrám...	Ditto ...	Logic and Moral Philosophy	D.
Kángá, Mánikji Dorábji	Latin ...	Mathematics	E.
Kelkar, Ganesh Pándurang	Sanskrit ...	Ditto	E.
Merchant, Pestanji Dádábhái	Persian ...	Natural Sciences	E.
Pai, Nágesh Vishvanáth...	Sanskrit ...	History and Political Economy... ...	St. X.
Pandiá, Chhaganlál Harilál	Ditto ...	Ditto ditto	E.
Puntámbekar, Venkatesh Dámodar ...	Ditto ...	Mathematics	D.
Vakil, Rustam Bamansháh	Latin ...	History and Political Economy... ...	E.

Pass.

Antiá, Jamshedji Mervánji	Persian ...	History and Political Economy... ...	F. G. A.
Apté, Govind Shridhar	Sanskrit ...	Mathematics	E.
Bákre, Rámchandra Vishnu	Ditto ...	Ditto	D.
Bhadbhade, Lakshuman Gangádhar . .	Ditto ...	Natural Sciences	D.
Cooper, Navroji Hormasji	Persian ...	Language and Literature	E.
Dalál, Ichhárám Bhagvándás	Sanskrit ...	Logic and Moral Philosophy	E.

Name.	Second Language.	Selected Subjects.	College.
Dastur, Dárásháh Peshutan	Persian ...	History and Political Economy... ...	E.
Desái, Gopálji Gulábbhái	Sanskrit ...	Language and Literature	E.
Desái, Motilál Dalpatrám	Latin ...	History and Political Economy... ...	E.
Desái, Upkár Ajubhái	Ditto ..	Ditto ditto	F. G. A.
Dixon, Rámá Mulji	Ditto ...	Natural Sciences	F. G. A.
Godbolé, Rámchandra Parshurám ...	Sanskrit ...	History and Political Economy ...	D.
Godbolé, Sadáshiv Mahádáji	Ditto ...	Natural Sciences	E.
Hodiválá, Edalji Behrámsháh	Persian ...	History and Political Economy	E.
Khambáti, Ranchhoddás Lallubhái ...	Sanskrit ...	Ditto ditto	E.
Mehtá, Makundrám Nityarám	Ditto ...	Ditto ditto	E.
Mirzá, Nasarvánji Frámji	Persian ...	Natural Sciences	St. X.
Patvardhan, Vishnu Anant	Sanskrit	Logic and Moral Philosophy	D.
Pávri, Fardunji Pálanji	Persian ...	History and Political Economy... ...	E.
Rájé, Náráyan Gopál	Sanskrit ...	Natural Sciences	E.
Sáné, Bálkrishna Rámchandra	Latin ...	Mathematics	D.
Saraiyá, Gokaldás Vithaldás	Ditto ..	History and Political Economy... ..	E.
Shirgávkar, Rámchandra Raghunáth ...	Sanskrit ...	Natural Sciences	E.
1882.			
First Class.			
Wágle, Krishnáji Balvant ...	Latin ...	Mathematics	E.

Second Class.			
Bhágvat, Rámchandra Bálkrishna ..	Latin ..	Logic and Moral Philosophy	D.
Bharuchá, Jiváji Kávasji	Persian ...	Ditto ditto	D.
Dámle, Shridhar Keshav	Sanskrit ...	Mathematics	E.
Deshmukh, Ganesh Krishna	Ditto ..	Logic and Moral Philosophy	E.
Deshpánde, Rámchandra Hanmant ...	Ditto ..	Ditto ditto	D.
Doctor, Dinsháh Jijibhái	Persian ...	History and Political Economy	F. G. A.
Joshi, Moro Vishvanáth	Sanskrit ...	Ditto ditto	E.
Narimán, Mánikji Kharshedji	Latin ...	Ditto ditto	E.
Pass.			
Bhándárkar, Prabhákar Rámkrishna ...	Sanskrit ...	Natural Sciences	E.
Bhárváni, Harchandrái Vishindas .	Persian .	History and Political Economy... ...	E.
Bhide, Bálkrishna Vishnu	Sanskrit ..	Mathematics	D.
Dángé, Ganesh Vishnu	Ditto ..	History and Political Economy... ...	E.
Dáruválá, Kharshedji Frámji	Persian ...	Natural Sciences	E.
Doctor, Jamshedji Barjorji	Latin ...	Ditto	E.
Jayakar, Sundarráo Gajánan	Ditto ...	Ditto	St. X. & F. G. A.
Joglekar, Vásudev Dáji	Sanskrit ...	Logic and Moral Philosophy	D.
Joshi, Ganesh Balvant	Ditto ...	Mathematics	E.
Joshi, Maheshvar Dhonddev	Ditto ...	Logic and Moral Philosophy	F. G.A.
Judge, Jametrám Nánábhái	Ditto ..	Ditto ditto	E.
Kángá, Mancherji Kávasji	Persian ...	Natural Sciences	E.
Kelkar, Hari Váman	Sanskrit ...	Logic and Moral Philosophy	E.
Kelkar, Vásudev Bálkrishna	Ditto ...	Ditto ditto	E.

Name.	Second Language.	Selected Subjects.	College.
Khote, Dvárkánáth Rámnáth	Sanskrit ...	Mathematics	F. G. A.
Lálkáká, Ardesir Jamshedji	Persian ..	Logic and Moral Philosophy	E.
Lele, Mahádev Venkatesh	Sanskrit ...	Natural Sciences	D.
Lele, Vishnu Káshináth	Ditto ...	Logic and Moral Philosophy	D.
Modi, Girdharlál Bhánábhái	Ditto ...	Ditto ditto	E.
Nátu, Rámchandra Raghunáth . .	Ditto ..	Ditto ditto	D.
Sanjáná, Jehángier Barjorji	Persian ...	Natural Sciences	F. G. A.
Sanzgiri, Dhondu Morobá	Sanskrit ...	Logic and Moral Philosophy	St. X. & E.
Shroff, Kharshedji Dhanjibhái	Latin ...	Natural Sciences	St. X.
Sohoni, Venkatesh Abáji	Sanskrit ...	Mathematics	D.
Soman, Dinkar Bháskar	Ditto ...	Logic and Moral Philosophy	E.
Sule, Bálkrishna Balvant	Ditto ...	Mathematics	E.
Vijayakar, Náráyan Moroji	Latin ...	Natural Sciences	St. X. & E.

B.Sc.

1882.

First Class.

Dáruválá, Jamshedji Edalji ... ... F. G. A.

Pass.

Khot, Anant Venkáji ... ... E.

LL.B.

1866.

First Division.

* Ránáde, Mahádev Govind, M.A. ... . L.
† Wágle, Bál Mangesh, M.A. ... ... L.

1867.

Second Division.

Bedarkar, Khanderáo Chimanráo, B.A. ... ... L.
Kotháre, Girdharlál Dayáldás, B.A.... ... ... L.

1868.

Second Division.

Dalvi, Dinánáth Atmárám, M.A. ... ... L.
Márphátiá, Nagindás Tulsidas, B.A. ... ... L.
Mehtá, Thákurdás Atmárám, B.A. ... . L.

1869.

Second Division.

Kohiyár, Ratansháh Erachsháh, B.A. ... ... L.
Páthak, Shápurji Hormasji, M.A. ... ... L.
Sayáni, Rahimtuláh Muhámmad, M.A. ... ... L.

1870.

Second Division.

Dádáchanji, Karshásji Rastamji, M.A. . ... L.
Desái, Ambálál Sákarlál, M.A. ... ... L.
Munshi, Mansukhlál Mugatlál, B.A. . ... L.
Nádkarni, Ghanashám Nilkant, B.A. ... . L.
Telang, Káshináth Trimbak, M.A. ... ... L.
Vikáji, Frámji Rastamji, B.A. ... ... L.

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* Passed also Honours in Law Examination, Class I.
† Passed also Honours in Law Examination, Class II

1871.

First Division.

Apte, Mahádev Chimnáji, B.A. ... ... L.
Dalál, Jamshedji Ardesir, M.A. ... ... L.
Dhurandhar, Sadáshiv Vishvanáth, B.A. ... . L.

Second Division.

Bhátavadekar, Gajánan Krishna, B.A. ... . L.
Davlatjádá, Chandulál Mathurádás, B.A. ... ... L.
Gádgil, Janárdan Sakhárám, B.A. ... ... L.
Ghásválá, Ardesir Frámji, B.A. ... ... L.
Mánkar, Ganpatráo Amritráo, M.A. ... . L.
Nánávati, Mánikji Nasarvánji, B.A. ... ... L.
Nánávati, Nágardás Narottamdás, B.A. ... . L.
Párekh, Gokuldás Káhándás, B.A. ... ... L.
Patel, Rastamji Mervánji, M.A. ... ... L.
Taleyárkhán, Mánekshah Jehángiershah, B.A. . ... L.

1873.

Second Division.

Modi, Barjorji Edalji, M.A. ... ... L.

1874.

Second Division.

Bhat, Chintáman Náráyan, B.A. ... ... L.
Deshmukh, Rámchandra Gopálráo, B.A. ... ... L.
Khandáláválá, Navroji Dorábji, B.A. L

1875.

Second Division.

Kotháre, Anandráo Krishnaráo, B.A. ... . L.
Maráthe, Káshináth Bálkrishna, B.A. ... ... L.

1876.

Second Division.

Athale, Yashvant Vásudev, M.A. ... ... L.
Bhánap, Gopál Vináyak, B.A. ... ... L.
Gokhale, Rámchandra Vishnu, B.A. ... ... L.
Kher, Krishnáji Náráyan, B.A. ... ... L.
Pandit, Vináyak Mahádev, B.A. ... ... L.

1877.

Second Division.

Dhairyaván, Vásudev Krishnaráo, B.A. ... ... L.
Kirloskar, Ganesh Rámchandra, M.A. ... ... L.
Tipnis, Raghunáth Shivrám, B.A. ... ... L.

1878.

Second Division.

Bhat, Harirám Uttamrám, B.A. ... ... L.
Inámdár, Venkatráo Rukhmángad, B.A. ... ... L.
Kángá, Dinsháh Pestanji, M.A. ... ... L.
Tullu, Ráoji Vásudev, M.A. ... ... L.

1879.

Second Division.

DeSa, Luis, B.A. ... ... L.
Joshi, Balvant Náráyan, B.A. ... ... L.
Joshi, Bháskar Shridhar, B.A. ... ... L.
Modi, Jehángier Edalji, B.A.... ... ... L.
Patvardhan, Vináyak Rámchandra, B.A. ... ... L.
Páudvál, Dvárkánáth Sakhárámji, B.A. ... ... L.

1880.

First Division.

Bhadbhade, Raghunáth Gangádhar, B.A. ... . L.
Gádgil, Pándurang Dhonddev, B.A.... ... ... L.

Second Division.

Ajinkya, Sitánáth Gopináth, B.A. ... ... L.
Bhándárkar, Shivrám Vithal, B.A. ... ... L.
Bhándárkar, Vásudev Gopál, B.A. ... ... L.
Bhatavadekar, Vishnu Krishna, B.A. ... ... L.
Dalál, Tribhuvandás Lakshmidás, B.A. ... . L.
DeSouza, Luis J. E., B.A. ... ... L.
Gándi, Jiváji Dinsháhji, B.A. ... ... L.
Huligol, Krishnaráo Mádhav, B.A. ... ... L.
Jambusarvála, Bejanji Mánikji, B.A. ... ... L.
Kánitkar, Govind Vasudev, B.A. ... ... L.
Káthavate, Manohar Vishnu, B.A. ... ... L.
Kirtane, Keshav Váman, B.A. ... ... L.
Ovalekar, Moreshvar Náráyan, B.A. ... ... L.
Ráo, Ganpat Sadáshiv, M.A. ... . L.
Sárangpáni, Krishnáji Vináyak, B.A. ... ... L.
Tilak, Bál Gangádhar, B.A. ... ... L.
Tullu, Govind Vásudev, B.A... ... ... L.
Upásani, Shridhar Bálkrishna, B.A.... ... ... L.

1881.

First Division.

Chandávadkar, Náráyan Ganesh, B.A. ... ... L.
Kháre, Dáji Abáji, B.A. ... ... L.

Second Division.

Dhruva, Harilál Harsadrái, B.A. ... ... L.
Divekar, Balvant Abáji, B.A. ... ... L.
Duncàn, Thomas, M.A. ... ... L.
Gimi, Rastamji Mancherji, B.A. ... ... L.
Golé, Siddheshvar Bháskar, B.A. ... ... L.
Jog, Pralhád Náráyan, B.A. ... ... L.
Joshi, Sakhárám Vásudev, B.A. ... ... L.
Kángá, Farđunji Mánikji, B.A. ... ... L.
Koparkar, Govind Bálkrishna, B.A. ... ... L.
Mudholkar, Rangnáth Narsinha, B.A. ... ... L.
Ráhurkar, Váman Náráyan, B.A. ... ... L.
Rele, Gangárám Bápsobá, B.A. ... ... L.
Sethná, Kávasji Bejanji, B.A. ... ... L.
Sethná, Rastamji Dhanjibhái, B.A. ... ... L.
Wágle, Shivrám Sitárám, B.A. ... ... L.

1882.

Second Division.

Bhágvat, Dattátraya Vishnu ... ... L.
Dave, Kevalrám Mávji... ... ... L.
Gokhale, Gopál Rámchandra... ... ... L.
Kángá, Sorábji Mánikji ... ... L.
Shaháni, Dayárám Gidumal ... ... L.

M.D.

1876.

Kunte, Anná Moreshvar, B.A., L.M. ... ... G.

L.M.

1862.

Second Division.

Lámná, Nasarvánji Jehángierji ... ... G.
Sanzgire, Shántárám Vithal ... ... G.
Vikáji, Kaikhosru Rastamji ... ... G.
*Barjorji Behrámji ... ... G.

*Surname not known.

1863.

Second Division.

DeRozario, Luis Philippe ... ... G.
Rávut, Sakhárám Arjun ... ... G.
Shiek Abdul Karim ... ... G.

1864.

Second Division.

DeSouza, Philip Clement ... ... G.
Khori, Rastamji Nasarvánji ... ... G.
Vaidya, Gopál Shivrám .. .. G.

1865.

First Division.

Howell, John Alexander ... ... G.
Nádirsháh, Rastamji Jamshedji ... ... G.

Second Division.

DeSouza, Pedro Jose Lucio ... ... G.
Hakim, Sheik Sultán ... ... G.
Kotháre, Shámráo Jagannáth... ... ... G.

1866.

First Class.

Baptista, Paulo Maria... ... ... G.

1867.

First Class.

Goradya, Amidás Manji ... ... G.
Jayakar, Atmárám Sadáshiv ... ... G.

1868.

First Class.

Gonsalves, João Francisco ... ... G.
Hakim, Abdul Rahim ... ... G.*

Second Class.

Daphtaré, Girdharlál Ratanlál ... ... G.

1869.

First Class.

Pereira, Mathias Francisco ... ... G.

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*Surname not known.

1871.

First Class.

Shribástam, Saruplál Bálakrám ... ... G.

Second Class.

Bháte, Balvant Gopál ... ... G.

1872.

First Class.

Bedford, Robert... ... ... G.
Sháh, Tribhuvandás Motichand ... ... G.

Second Class.

DaGama, Jeronimo Accacio ... ... G.
Kantak, Shántárám Vináyak ... ... G.
Patel, Kásam Virji ... ... G.
Valles, Domingos Braz... ... ... G.

1873.

First Class.

Masáni, Hormasji Dádábhái ... ... G.

Second Class.

Narimán, Temulji Bhikáji ... ... G.
Paránjapye, Mahádev Yashvant ... ... G.
Shirválkar, Trimbak Sakhárám ... ... G.

1874.

First Class.

Bhátavadekar, Bhálchandra Krishna ... ... G.
Desái, Ganesh Rámchandra ... ... G.

Second Class.

DaCosta, Nicolao Salvador ... ... G.
DeSouza, Antonio Manoel ... ... G.
Godámbe, Yashvant Pándurang ... ... G.
Kámat, Dharmáji Ganesh ... ... G.
Khambátá, Nasarvánji Navroji ... ... G.
Pereira, Joseph ... ... G.

1875.

First Class.

Narimán, Kaikhosru Sorábji ... ... G.

Second Class.

Antão, John Alcantara... ... ... G.
Hakim, Abdul Gháni ... ... G.
Nánávati, Rastamji Hormasji... ... ... G.
Nunes, Ignacio Domingos ... ... G.
Saraiyá, Rámdás Gangádás ... ... G.
Sulemáni, Shamsudin Jivábhái ... . G.

1876.

First Class.

Bharuchá, Rastamji Pestanji ... ... G.
Cooper, Kaikhosru Barjorji ... ... G.
Dalgado, Daniel G. ... ... G.
DeConceição, Philip ... ... G.
Mákuná, Mánikji Dosábhái ... ... G.
Sabnis, Dattu Ganesh ... ... G.

Second Class.

Damniá, Phirozsháh Jamshedji ... ... G.
Gimi, Mánikji Mancherji ... ... G.
Gomes, Dominic Anthony ... ... G.
Kándáválá, Dosábhái Barjorji ... ... G.
Kápadiá, Bejanji Dádábhái ... ... G.
Khambátá, Jamshedji Dinsháh ... ... G.
Páthak, Krishnaráo Gopál ... ... G
Pinto, Luis Jose... ... ... G.
Postválá, Mancherji Sorábji ... ... G.
Reporter, Mánikji Edalji ... . — ... G.

L.M.&S.

1877.

First Class.

Cámá, Ardesir Pestanji ... ... G
DeSouza, Joseph A. ... ... G.
Jervis, Henry ... ... G.

Second Class.

DeCunha, John Thomas ... ... G
Devéchá, Frámji Ratanji ... ... G
D'Oliveira, Braz A. ... ... G
Lobo, Bellarmino ... ... G
Mehtá, Batukrám Sobhárám ... ... G.
Mistri, Dinsháh Dorábji ... ... G.
Mistri, Kávasji Hormasji ... ... G.

1878.

First Class.

Braganza, Bellarmino ... ... G.
Dádiná, Ratanji Rastamji ... ... G.
Dalál, Thákurdás Kikábhái ... ... G.
Desái, Manilál Gangádás ... ... G.
Doctor, Phirozsháh Pálanji ... ... G.
Frenchman, Edalji Pálanji ... ... G.
Káji, Lallubhái Bhagvándás ... ... G.
Vaidia, Kuvarji Kávasji ... ... G.
Vyás, Shivnáth Rámnáth ... ... G.
Munshif, Barjorji Sorábsháh ... ... G.

Second Class.

Appu, Hirjibhái Jamshedji ... ... G.
Bharuchá, Phirozsháh Behrámji ... ... G.
Dáruválá, Bamanji Frámji ... ... G.
Dias, Victorino ... ... G.
Doctor, Rámlál Lallubhái ... ... G.
Fonseca, Caetano ... ... G.
Kolápurválá, Jamshedji Frámji ... ... G.
Nánávati, Bálábhái Maganlál ... ... G.
Pandit, Ratanbhadra Manibhadra ... ... G.
Sanjáná, Kávasji Kharshedji ... ... G.
Sethná, Erachsháh Frámji ... ... G.

1879.

First Class.

Cámá, Rastamji Hormasji ... ... G.
Deshmukh, Moreshvar Gopál... ... ... G.
Doctor, Dhanjibhái Barjorji ... ... G.
Garde, Ganesh Krishna ... ... G.
Gazdar, Sorábji Fardunji ... ... G.
Jayakar, Vishvásráo Báláji ... ... G.
Keláválá, Mánikshah Jamshedji ... ... G.
Khot, Govind Venkáji ... ... G.
Simoens, Joseph Auspicio ... ... G.

Second Class.

Bocarro, A. ... ... G.
Damniá, Bhikáji Jiváji... ... ... G.
Dhurandhar, Krishnaráo Vishvanáth ... . G.
Gunderiá, Chunilál Govardhandás ... ... G.

Karanjiá, Mervánji Dhanjibhái ... ... G.
Mudliar, Náráyan Vekatachelam ... ... G.
Revitná, Dádábhái Kharshedji ... ... G.
Talvalkar, Rámchandra Gangádhar ... ... G.
Tárápurválá, Shávaksháh Sorábji ... ... G.

1880

First Class.

Choksi, Dosábhái Ardesir ... ... G.
Dádáchanji, Kávasji Edalji ... ... G.
Dádáchanji, Pálanji Hormasji .. .. G.
Dáji, Jehángier Kharshedji ... ... G.
Engineer, Kaikhosru Sorábji... ... ... G.
Gandeviá, Mervánji Navroji ... ... G.
Gokhalé, Vithal Vishnu, M.A. ... ... G.
Kharegát, Mervánji Pestanji... ... ... G.
Rozario, Michael Arthur ... ... G.
Tukiná, Edalji Kávasji.. ... ... G.
Wádiá, Dhanjibhái Rastamji ... ... G.
Wádiá, Jehángier Pestanji ... ... G.

Second Class.

Broker, Vithaldás Manordás . ... G.
DeNazareth, Joaquim Vincent ... . G.
Lisboa, Patrocinio .. .. G.
Prabhákar, Govindráo Bháu ... ... G.

1881.

First Class.

Banát, Hormasji Edalji ... ... G.
Báriá, Dárásháh Hormasji ... ... G.
Lilámválá, Jehángier Jamshedji ... ... G.
Master, Dinsháh Bamanji ... ... G.
Mulán, Pirozsháh Pálanji ... ... G.
Patvardhan, Dhondo Appáji ... ... G.
Umrigar, Nánábhái Rastamji... ... ... G.
Víegas, Accacio Gabriel ... ... G.

Second Class.

Bhende, Káshináth Krishna ... ... G.
Boyce, Sorábji Rastamji ... ... G.
Chhatrapati, Nilkanth Dáyábhái ... ... G.
Desái, Chunilál Ghelábhái ... . G.

Dhume, Dámodar Raghunáth... ... ... G.
Divechá, Frámji Dorábji ... ... G.
Gidha, Vináyakráo Govind ... ... G.
Joshi, Vithal Bálkrishna ... ... G.
Kápadiá, Rastamji Jamshedji ... ... G.
Mádan, Frámji Edalji ... ... G.
Mus, Frámroz Ardesir... ... ... G.
Nádirsháh, Sorábji Dosábhái ... ... G.
Nánji, Ratanji Dorábji... ... . G.
Páscal, Sorábji Kávasji ... ... G.
Sirvái, Hormasji Jamshedji ... ... G.
Sirvái, Hormasji Nasarvánji ... ... G.

1882.

First Class.

Apte, Vishnu Gopál ... ... — ... G.
Bonesetter, Fakirji Ratanji ... ... G.
Gandeviá, Navroji Bamanji ... ... G.
Káká, Sorábji Mánikji. ... ... G.
Modi, Ardesir Dádábhái ... ... G.
Nánávati, Behrámji Hormasji ... ... G.

Second Class.

Coachman, Sorábji Ratanji ... ... G.
Dántrá, Barjorji Hormasji ... ... G.
Dhárgalkar, Lakshuman Bacháji ... ... G.
Edal-Behrám, Dinsháh Jiváji ... ... G.
Káne, Sadáshiv Váman ... ... G.
Motiválá, Dinsháh Hormasji . ... G.
Shirgávkar, Vishnu Jagannáth ... ... G.
Shroff, Barjorji Sorábji ... ... G.
Váchá, Rastamji Kharshedji... ... ... G.

L.C.E.

1869.

Second Class.

Tilak, Gopál Ráoji ... ... P.E.

1870.

Second Class.

Adarkar, Anant Náráyan ... ... P.E.
Bhat, Gangádhar Anant, M.A. ... ... P.E.
Desái, Khandubhái Gulábbhái ... ... P.E.

1871.

Second Class.

Nágávkar, Abraham Samuel ... ... P.E.
Oká, Rámchandra Govind, B.A. ... ... P.E.

1872.

Second Class.

Joshi, Náráyan Bábáji .. .. P.E.
Kiráne, Gangádhar Rámkrishna ... ... P.E.

1873.

First Class.

Dáte, Náráyan Vináyak ... . P.E.
Godbole, Káshináth Rámchandra, B.A. .. .. P.E.

Second Class.

Sáne, Báláji Bápuji, B.A. ... ... P.E.
Vajifdár, Mánikji Hormasji ... ... P.E.

1874.

First Class.

*Bamanji Sorábji ... ... P.E.

Second Class.

Bhadá, Nasarvánji Dorábji ... ... P.E.
Bhidé, Prabhákar Gangádhar ... ... P.E.
Dhumatkar, Pundlik Ganesh ... ... P.E.
Kángá, Hormasji A'darji .. .. P.E.
Karve, Vásudev Hari ... ... P.E.
Khandáláválá, Pestanji Dorábji ... ... P.E.
Váslekar, Nánáji Náráyan ... ... P.E.

1875.

First Class.

Chandanáni, Pritamdás Parsumal ... ... P.E.
Dalál, Chunilál Táráchand ... ... P.E.

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*Surname not known.

Second Class.

Modi, Ardesir Kávasji ... ... P.E.
Pile, Bálkrishna Náráyan ... ... P.E.

1876.

First Class.

Nimmo, Edward Hope .. .. P.E
Tárápurválá, Fardunji Kuvarji, B.A. ... ... P.E.
Williams, Arthur Henry ... ... P.E.

Second Class.

Dámle, Jagannáth Vishnu .. .. P.E.
Hindiá, Durgárám Ghelábhái ... ... P.E.
Kavishvar, Lallubhái Dalpatrám ... ... P.E.
Mulé, Rámchandra Ballál .. .. P.E.
Nánávati, Dáyábhái Maganlál ... ... P.E.
Sáthe, Dhondo Sakhárám ... ... P.E.

1877.

First Class.

Páthak, Pestanji Hormasji, B.A. ... ... P.E.

Second Class.

Bhándárkar, Náráyan Pándurang ... ... P.E.
Bhedvár, Kaikhosru Pestanji ... ... P.E.
Desái, Motibhái Vághjibhái ... ... P.E.
Dharmádhikári, Bálkrishná Gangádhar ... ... P.E.
Lavánivál, Eknáth Sakhárám ... . P.E.
Modak, Anant Raghunáth .. .. P.E.
Nagarset, Vithaldás Narottamdás ... ... P.E.
Phadke, Lakshuman Chintáman ... ... P.E.
Ráná, Rudarji Sundarji ... ... P.E.

1878.

Second Class.

Bhágvat, Sadáshiv Rámchandra ... ... P.E.
Chhatre, Nilkanth Vináyak ... ... P.E.
Chiplunkar, Mahádev Trimbak ... ... P.E.
Desái, Vasanji Kalhánji . ... P.E.
Keshkámat, Rámchandra Anant ... ... P.E.
Ribeiro, C. Antonio ... ... P.E.
Rodrigues, Joaquim ... ... P.E.

Pass.

Bámji, Shápurji Dádábhái ... ... P.E.
Kánitkar, Bálkrishna Ganesh ... ... P.E.
Mehtá, Harivadanrám Manirám ... ... P.E.
Saráf, Venkatráo Anant ... ... P.E.

1879.

First Class.

Apte, Ganesh Krishna, B.A. ... ... P.E.

Second Class.

Desái, Gulábbhái Kanthadji ... ... P.E.
Gurjar, Pándurang Gopináth ... ... P.E.
Kelkar, Vishnu Raghunáth .. .. P.E.
Muzumdár, Máneklal Narbherám... ... ... P.E.

Pass.

Dalál, Jamshedji Jehángier ... ... P.E.
Dás, Dharnidhar ... ... P.E.
Hajaráh, Dinánáth ... ... P.E.
Kalghatgi, Krishnáji Gururáo ... ... P.E.
Láte, Vásudev Pándurang ... ... P.E.
Methá, Vithaldás Chimanlál ... . P.E.
Mus, Nánábhái Ardesir ... ... P.E.
Nádarsháh, Jamshedji Dádábhái ... ... P.E.
Nagarkar, Váman Dáji ... ... P.E.
Pávri, Kharshedji Navroji... ... ... P.E.
Sheth, Bhukandás Itchhárám ... ... P.E.

1880.

First Class.

Gáytonde, Gopál Vishvambhar ... ... P.E.

Second Class.

Dudley, Charles Wiltshire ... ... P.E.
Ghárpure, Rámchandra Govind ... ... P.E.
Gokhale, Vithal Mahádev ... ... P.E.
Hall, William ... ... P.E.
Ribeiro, F. P. Victor ... ... P.E.
Williamson, Alexander John ... ... P.E.

Pass.

Bhándáre, Rámchandra Bhikáji ... ... P.E.
Ghárpure, Náráyan Hari ... ... P.E.

Páthak, Pránshankar Dayáshankar ... ... P.E.
Siddhe, Dinkar Náráyan ... ... P.E.

1881.

First Class.

Bharuchá, Mánikji Sheriárji ... ... C.Sc.
Chakrabati, Bhutanáth ... ... C.Sc

Second Class.

Bilgi, Rudrappá Virbasáppá ... ... C.Sc.
Desái, Vithal Tátiá ... ... C.Sc.
Gadgil, Anant Rámchandra ... ... C.Sc.
Lele, Mahádev Venkatesh... ... ... C.Sc
Moharir, Báláji Gangádhar ... ... C.Sc.
Spencer, Hiráji Nánábhái .. .. C.Sc.
Sukthankar, Sitárám Vishnu ... ... C.Sc.

Pass.

Khándekar, Keshav Ganesh ... ... C.Sc.
Engineer, Raghunáth Makund ... ... C.Sc.
Khandheriá, Popatlál Dungarsi ... ... C Sc.
Lálá, Kiasing Rámsing ... ... C.Sc.
Mehtá, Váváhhai Haridás ... ... C.Sc.
Modi, Maganlál Thákordás ... ... C.Sc.
Nádirsháh, Ardesir Navroji ... ... C.Sc.
Ráo, Kekobád Hormasji ... ... C.Sc.

1882.

Second Class.

Angal, Ráoji Báburáo ... ... C.Sc.
Belani, Khimchand Ravji... ... ... C.Sc.
Boga, Dhanjibhái Rastamji ... ... C.Sc.
Desái, Náthábhái Avichaldás ... ... C.Sc.
Gánu, Keshav Hari ... ... C.Sc.
Mhaskar, Shripat Vishnu ... ... C.Sc.
Surveyor, Mánikji Ratanji ... ... C.Sc.

Pass.

Joshipará, Pránlál Kahándás ... ... C.Sc.
Kángá, Kávasji Dádábhái ... ... C.Sc.
Náik, Kasanji Ranchhodji ... ... C.Sc.
Náik, Timáji Venkatesh ... ... C.Sc.
Pandit, Parshurám Vithal ... ... C.Sc.
Pávri, Bamanji Hormasji ... ... C.Sc.
Pávri, Dorábji Temulji ... ... C.Sc.
Trivedi, Bhagvánji Nágji... ... ... C.Sc.

UNDERGRADUATES.

UNDERGRADUATES AND OTHERS WHO HAVE PASSED THE FIRST EXAMINATION FOR THE DEGREE OF B.A.

1881.

First Class.

Ajrekar, Keshav Ganesh ... ... E.

Second Class.

Bharúchá, Frámji Dorábji' ... ... D.
Cámá, Jehángier K. R. ... .St.X.
Chaván, Bastisinha Duniásinha ... ... D.
Chitnis, Malhár Khanderáo ... ... E.
Dalvi, Anandráo Sadáshiv ... ...St.X.
Gokhale, Mahádev Vishnu ... ... E.
Gokhale, Náráyan Vishnu ... ... E.
Kuka, Meherji Nasarvánji ... ... E.
Lagháte, Govind Balvant... ... ... E.
Phadke, Náráyan Lakshuman ... ... E.
Vaidya, Lakshuman Rámchandra ... ... E.

Pass.

Bhide, Vidyádhar Váman ... ... D.
Billimoriá, Sorábji Frámji ... ...St.X.
Chándorkar, Náráyan Govind ... ... E.
Dastur, Meher Hosháng ... . D.
Deshpánde, Rámchandra Malhár .. .. D.
Joshi, Vináyak Bábáji ... ... D.
Karandikar, Dámodar Krishna ... ... E.
Killedár, Gopál Lakshuman ... ... D.
Lálváni, Vazirmal Uttamchand... ... ... E.
Látkar, Shamji Anant ... . D.
Mangalvedhekar, Náráyan Rághavendra ... ... D.
Masáni, Adarji Mernosji ... ...F.G.A
Moré, Vináyak Mádhavráo' ... ... St.X.
Nádgir, Malhár Mártand... ... ... D.
Nulkar, Lakshuman Krishnáji ... ... D.
O'Grady, George Austin ... ...St.X.
Patel, Jamshedji Káyasji ... ... St.X.
Sahasrabudhe, Náráyan Ganesh... ... ... D.
Sapre, Dattátraya Sadáshiv ... ...F.G.A
Tátá, Dorábji Jamshedji ... ...St.X.
Unválá, Ardesir Frámji .. .. E.
Vajifdár, Jamshedji Merjibhái ... ...St.X.

UNDERGRADUATES AND OTHERS WHO HAVE PASSED THE FIRST EXAMINATION FOR THE DEGREE OF B.SC.

1880.

Second Class.

Marzbán, Marzbán Mancharji ... ... E.
Pandit, Harilál Mulshankar ... ... E.

1881.

First Class.

Deshmukh, Moreshvar Gopál ... ... E.

Second Class.

Gajjar, Tribhuvandás Kalliándás ... ... E.

UNDERGRADUATES AND OTHERS WHO HAVE PASSED THE FIRST EXAMINATION IN ARTS.

1861.

Bál, Krishnáji Bápuji ... ... E.
Parmánand, Náráyan Mahádev ... ... E.

1862.

Mayadev, Trimbakráo Bápuji ... ... E.

1863.

* Barzorji Kharsedji... ... ... D.

1864.

Devbhánkar, Náráyan Vámaji ... ... D.
Dhairyavan, Keshav Vináyak ... ... D.
Mistri, Pálanji Adarji ... ... E.
Sodá, Tulsidás Devidás ... ... E.
Távernválá, Sorábji Mancherji ... ... E.

1865, *March.*

* Govindás, Varjivandás ... ... E.

1865, *December.*

Angriá, Jaisingráo Esji ... ... D.
Chichgar, Hormasji Mancherji ... ... E.
Davé, Revashankar Tripuráshankar ... ... E.
Khambátá, Nasarvánji Navroji ... ... F.G.A.& E
* Dvárkánáth Rághobá — ... ... D.

* Surname not known.

1866.

Aitken, Benjamin ... ...F.G.A.
Boyce, Pestanji Edalji ... ... E.
Britto, Julius Lucas... ... ...F.G.A.
Gunderiá, Mániklál Gordhandás ... ... E.
Patvardhan, Vishnu Gopál .. .. D.

1867.

Kolatkar, Váman Mahádev... ... ... E.
Modi, Barzorji Rastamji ... ... E.
Mulá, Fardunji Kávasji ... ... E.
Nánávati, Dádábhái Nasarvánji ... ... E.
Patel, Nasarvánji Hirjibhái... ... ... E.
Tilak, Narhar Purshottam ... ... D.
Vaidya, Vásudev Hari ... ... E.

1868.

Bhidé, Lakshuman Vishnu... ... ... D.
Chitalé, Mahádev Bálkrishna ... ... D.
Dávar, Jehángier Edalji ... ... E.
Dáve, Bhánushankar Náráyanshankar ... ... E.
Desái, Nitchábhái Murárji ... ... E.
Deshmukh, Ganesh Dádáji ... . D.
Dikshit, Chhabilrám Dolatrám ... ... E.
Fernandez, Edward Elias ... ... D.
Javeri, Navanidhlál Govindlál ... ... E.
Kirtikar, Kánobá Ranchoddás ... ... E. & F.G.A.
Mádan, Jamshedji Fardunji ... ... E.
Mávlankar, Krishnaráo Narsopant ... ... E.
Mistri, Kávasji Mancherji ... ... E.
Modak, Báláji Prabhákar ... ... D.
Modi, Dinsháh Sorábji ... ... E.
Modi, Kávasji Edalji ... ... E.
Pandit, Sitárám Náráyan ... ... E.
Phátak, Shrikrishna Bápu ... ... D.
Ratnágar, Nasarvánji Jamshedji ... ... E.
Sámbre, Ganesh Raghunáth ... ... D.
Soman, Sitárám Gopál ... ... E.
Vimáválá, Maganbhái Kasturchand ... ... E.
Wágle, Hari Bhikáji... ... ... E.

1869.

Ambardekar, Govind Krishna ... ... E.
Athale, Bhikdev Vásudev ... ... E.
Bakhle, Rámchandra Ganesh ... ... D.
Bhángávkar, Káshináth Náráyan... ... ... E.

Bhat, Nilkanth Náráyan	D.
Chhatre, Atmárám Moreshvar	E.
Dalál, Dalpatrám Vithaldás	E.
Desái, Saváilál Govindrám	E.
Dev, Krishnáji Siddheshvar	D.
Dhulekar, Dámodar Bálkrishna	D.
Hátvalne, Shankar Rámchandra	D.
Joshi, Báláji Náráyan	E.
Mehtá, Valabhrám Vajerám	E.
Párikh, Lallubhái Pránvalabh	E.
Páthak, Anant Náráyan	E.
Shroff, Edalji Sorábji	E.

1870

Bámboatválá, Sorábji Adarji	E.
Bátliválá, Edalji Sorábji	E.
*Chintámanipethkar, Pándurang Venkatesh	D.
Diké, Rámchandra Chintáman	D.
Gádgil, Krishnáji Parshurám	D.
Ganpule, Náráyan Vináyak	D.
Gokhale, Ganesh Káshináth	D.
Kángá, Sorábji Pestanji	E.
Kápadiá, Jagjivan Bhavánishankar	E.
Kohiyár, Jehángiershah Erachsháh	E.
Kutár, Kharshedji Rastamji	E.
Pánandikar, Gopál Venkatesh	F.G.A. & E.
Pandit, Hari Mádhav	E.
Patel, Behrámji Bamanji	E.
Sáthe, Mahádev Anant	E.
Vaidya, Rámchandra Janárdan	E.
Ved, Dulabji Dharamshi	E.

1871.

Bhájiválá, Pestanji Kharshedji	E.
Chiplunkar, Sitárám Hari	D.
Cooper, Dádábhái Hormasji	E.
*Dámle, Krishnáji Hari	E.
Godre, Rámchandra Venkatesh	D.
Hakim, Muhámmad Hussein	E.
Joglekar, Vishnu Krishna	D.
Kále, Nánábhái Sadánand	E.
Khambátá, Pestanji Aspandiárji	E.
Málpekar, Náráyan Rámchandra	E.
Mudholkar, Shrinivás Narsinh	D.
Sule, Sitárám Bhagvant	E.

* Passed the B.A. Examination of 1875.

1872.

Abhyankar, Vithal Trimbak ... ... D.
Asirkar, Vishnu Mahipat ... ... E.
Bhavanáni, Dolatrám Suratsing ... ... E.
Chiplunkar, Mahádev Trimbak ... ... D.
Gadre, Gangádhar Pándurang ... ... D.
Gothaskar, Sakhárám Pándurang ... ... E.
Mávlankar, Váman Keshav ... ... E.
Patvardhan, Rámchandra Vishvanáth ... ... D.

1873.

Anikhindikar, Sambhu Chandáppá ... ... D.
Apte, Krishnáji Ballál ... ...F.G.A.
Apte, Shankar Ráoji ... ... D.
Arjáni, Mánikji Dadábhái ... ... E.
Atre, Rango Bálkrishna ... ... D.
Bápat, Vásudev Sadáshiv ... ... E.
Belsaré, Malhári Bhikáji ... ... E.
Bháte, Sadáshiv Bálkrishna ... ... E.
Dalál, Mánikji Nasarvánji ... ... E.
Dánde, Keshav Govind ... ... D.
Desái, Dolatrái Surbhái ... ... E.
Devnalkar, Bhiku Rághobá... ... ...F.G.A.
Gore, Náráyan Shivrám ... ... D.
Kále, Gangádhar Hari ... ... D.
Keily, Robert... ... ...St X.
Kelkar, Purshottam Gopál ... ... E.
Kelkar, Vishnu Raghunáth... ... ... D.
Lokurkar, Svámiráo Rághavendra... ... ... D.
Lyons, William Robert ... ...St. X.
Nerurkar, Govind Nilkanth ... ... E.
Patel, Rastamji Dhanjibhái... ... ... E.

1874.

Bharuchá, Sheriárji Dádábhái ... ... E.
Bidi, Shrinivás Jiváji ... ... D.
Corkery, William Alfred ... ... E.
Dhairyaván, Raghunáth Dvárkánáth .. ..St. X.
Gokhale, Vishnu Náráyan ... ... F.G.A.
Gordon, Robert Lish ... ... E.
Heblikar, Bháskarráo Rámchandra ... ... D.
Jamsetji, Kávasji Kharshedji ... ... E. & St. X.
Jervis, Alfred Samuel ... ... E. & St. X.
Káji, Bálkisandás Brijbhukandás ... ... E.
Kále, Náráyan Rámchandra ... ... E.
Kamlápurkar, Shrinivás Svámiráo... ... ... D.

Khambátá, Dinsháh Dosábhái	E.
Kher, Sitárám Náráyan	D.
Khot, Náráyan Venkáji	F.G.A.
Lele, Káshináth Krishna	D.
Mandlik, Dhondo Gangádhar	E. & F. G. A.
Manghirmalláni, Hasram Hotchand	E.
Mirzá, Kalichkhán Fraidunbeg	E.
Mudliar, Dámodar Viziárangám	D.
Mulgávkar, Vináyak Náráyan	E. & St. X.
Nábar, Vásudev Shiváji	E.
Nichhure, Ganesh Anant	D.
Oka, Krishnáji Govind	D.
Padvekar, Vishnu Sakhárám	St.X.
Panhálkar, Rámchandra Abáji	E.
Párikh, Chhotálál Durgárám	E.
Patvardhan, Mahádev Vithal	D.
Purandhare, Khanderáo Vithal	D.
Renávikar, Anant Apáji	D.
Sett, Motichand Udhavji	E.
Sukthankar, Sitárám Vishnu	St.X.
Tarkhad, Shrinivás Dádobá...	St.X.
*Abduláli, Moizuddin Jivábhái	E.

1875.

Bádsháh, Kávasji Jamasji	E.
†Bhandivád, Venkatesh Bhimráo	D.
Chavkar, Vináyak Balvant...	D.
Chinái, Bejanji Sorábji	D.
Dátár, Sitárám Ráoji	E.
Deshpánde, Bhikáji Anandráo	E. & F. G. A.
Dharádhar, Vasant Lakshuman	St. X.
Dhavle, Govind Moreshvar...	D.
Dhond, Jagannáth Krishna...	E.
Gokhale, Vithal Mahádev	E.
Gondhalékar, Rámchandra Mahádev	D.
Hiráná, Dosábhái Merváni...	F. G. A. & E.
Joglekar, Vásudev Rámchandra	E.
Jones, John Hugh	E.
Joshi, Ganesh Krishna	E.
Joshi, Lakshuman Janárdan	F. G. A. & E.
Kavmudiá, Manilál Sevakrám	E.
Kerur, Bábáji Yalgurd	D.
Lálváni, Lilárám Vatanmal...	E.
Lavji, Ardesir Ratanji	E.
McInerny, James	St. X.
Paithankar, Krishnáji Malhár	D.

* Surname not known. † Passed B.A. of 1879.

Pandiá, Dolatrám Kirpárám ... ... E.
Parulékar, Shivrám Hari ... ... E.
Páthak, Navroji Hormasji ... ... E.
Páthak, Sorábji Kaikhosru... ... ... E.
Pátháre, Káshináth Janárdan ... ... E.
Patvardhan, Hari Rámchandra ... ... E.
Pávgi, Náráyan Bhavánráo... ... ... E.
Pereira, Conrad R. ... ...St. X.
Samshi, Anant Venkatesh .. .. E.
Sátpute, Náráyan Raghunáth ... ... E.
Táki, Rámchandra Shankar ... ... E.
Vád, Vithal Apáji ... ... D.

1876.

Alimchandáni, Davlatrám Jethmal ... ... E.
Blakeman, William Alfred... ... ... E.
Ghaisás, Keshav Vishnu ... ... E.
Jalgávkar, Khando Shámráo ... ... D.
Karmarkar, Hari Ganesh ... ... D.
Malkáni, Shásanmal Pribdás ... ... E.
Manerikar, Yashvant Purshottam ... ... E.
Paránjapyé, Báláji Rámchandra ... ... E.
Pinto, Peter Manuel ... ... D.

1877.

Pass.

Athale, Padmákar Dámodar ... ... E.
Bhándáre, Sadánand Trimbak ... ... E.
Gavánkar, Lakshuman Rághobá ... ... E.
Kátrak, Hormasji Shápurji .. ..F.G.A.
Kelkar, Sadáshiv Ganesh ... ... E.
Kulkarni, Báláji Hari ... ... E.
Mehd, Vaikunthrái Anandrái ... ... E.
O'Sullivan, James John ... ...St. X.
Padamji, Sorábji Pestanji ... ... D.
Pandit, Náráyan Bháskar ... ... E.
Phátarpekar, Shankar Rámchandra ... ... E.
Puráni, Bálkrishna Narbherám ... ... E.
Sutáriá, Lallubhái Mathurbhái ... ... E.
Vyás, Hargovind Harináráyan ... ... E.
Zuzarte, Amaro Andre .. .. E. & St. X.

1878.

Second Class.

Dhruva, Keshav Harsad ... . E.

Pass.

Anklesariá, Bamansháh Kharshedji ... ... E.
Bangáli, Trimbak Ganesh ... ... D.
Bávdekar, Ganesh Krishna... ... ... D.
Buch, Bhupatrái Dayálji ... ... E.
Chavbal, Mahádev Sitárám... ... ... E.
Chitalé, Govind Venkatésh... ... ... F.G.A.
Dátár, Shambhu Shankar ... ... D.
Dáte, Krishnáji Siddheshvar ... ... D.
Doctor, Pránjivan Náráyan... ... ... E.
Ghodi, Chhaganlál Murlidhar ... ... E.
Gracias, Pascal ... ...St. X.
Joshipará, Pránlál Káhándás ... ... E.
Kátrak, Mánikji Shápurji ... ...F.G.A.
Majmudár, Govindlál Bápálál ... ... E.
Masurkar, Krishnáji Shrinivás ... . D.
Oltikar, Hari Rámkrishna... ... ... E.
Rángnekar, Náráyan Atmárám ... ... E.
Vánvale, Sadáshiv Rangnáth ... ... D.

1879.

Second Class.

Godbole, Sadáshiv Mahádáji ... ... E.
Pereira, Frank Charles ... ... St. X.

Pass.

Aiken, John Charles... ... ... D.
Bangáli, Shrikrishna Khanderáo ... ... D.
Broker, Rámdás Chhabildás ... ... E.
Dabir, Balvant Náráyan . ... E.
Daru, Harilál Tuljárám . ... E.
Desái, Varajrái Santukrái ... ... E.
Deshmukh, Vináyak Sakhárám ... ... D.
Doctor, Bápuji Pálanji ... ...St. X.
Ghásválá, Sorábji Edalji ... ... E.
Godbole, Nágnáth Keshav ... ... D.
Jahágirdár, Hanumant Rághavendra ... ... D.
Jámbhekar, Hari Bhimráo ... ... D.
Javeri, Pránlál Dvárkádás ... ... E.
Jokágar, Jametrám Raghurám ... ... E.
Kángá, Nasarvánji Kávasji... ... ...St. X.
Khambátá, Sorábji Kávasji... ... ... E.
Khándekar, Gopál Rámchandra ... ... F.G.A. &
Kharé, Bápu Abáji ... ... D.
Kirtikar, Sitárám Bálkrishna ... . E.
Maráthe, Trimbak Moreshvar ... ... D.
Mehtá, Sámaldás Chhaganlál ... ... E.

Náik, Nágarji Dáyábhái ... ... E.
Petit, Bamanji Dinsháhji ... ...St. X.
Phátak, Shripat Bálkrishna ... ... D.
Pitke, Gopál Rámchandra ... ... E.
Ránáde, Yashvant Nágesh ... ... D.
Sámant, Hari Rámkrishna... ... ... F.G.A.
Shukla, Náráyan Gangádhar ... ... D.
Táskar, Parshurám Bálkrishna ... ... E.
Vaidya, Rastamji Mánikji ... ... E.
Vijayakar, Yashvantráo Khanderáo ... ... E.

1880, *April.*

Second Class.

Bahádurji, Kaikhosru Nasarvánji... ... ... St.X.
Kále, Govind Rámchandra ... ... D.
Manerikar, Bháskar Dhonddev ... ... St.X.
Pandit, Vishvanáth Nilkanth ... ... E.
Phansalkar, Rámchandra Ballál ... ... D.
Vakil, Ochhavrám Nánábhái ... ... E.

Pass.

Akhund, Vali Muhámmad Hassan Ali ... ... E.
Allbless, Navroji Dádábhái... ... ... E. & St. X.
Ariá, Ardesir Dádábhái ... ... F.G.A.
Athvankar, Anandráo Mangesh ... ... E.
Betigiri, Bághavendra Bhojo ... ... D.
Bháve, Purshottam Moreshvar ... ... F.G.A.
Bhide, Krishnáji Náráyan ... ... D.
Chitalé, Bálkrishna Náráyan ... ... St. X. & D.
Dalál, Motilál Gangádás ... ... E.
Dáte, Báláji Sadáshiv ... ... D.
Desái, Khushálbhái Ranchhodji ... ... G. C.
Desái, Sadgun Desáibhái ... ... F.G.A.
Dhume, Anandráo Raghunáth ... ... St. X.
Dikshit, Harí Sitárám ... ... F.G.A.
Doctor, Rustim Dosábhái ... ... E.
Godbole, Rámchandra Jagannáth ... ... D.
Jayakar, Ishvarchandra Rámchandra ... . St X.
Joglekar, Rámchandra Náráyan ... ... D.
Joshi, Náráyan Dámodar ... . D.&E.
Kalburgi, Viráppa Racháppá ... ... D.
Khánvalkar, Krishnáji Sadáshiv ... ... D.
Kháre, Ganesh Náráyan ... ... E.
Modi, Kaikhosru Frámji ... ... E.
Mohile, Hari Atmárám ... ... F.G.A.
Mundalé, Rámchandra Ganesh .. .. D.
Nádgir, Narsingráo Ganesh .. .. D.
Nádkarni, Mahádev Gangádhar ... ... E.

Názar, Atmárám Hirálál	E.
Pai, Dattárám Vishvanáth	St.X.
Patvardhan, Pándurang Ganpat	St.X.
Phátak, Vishnu Bháskar	D.
Pradhán, Sitárám Abájiráo...	D.
Pradhán, Vináyak Harishankar	E.
Puránik, Balvant Mahádev...	D.
Sádhale, Vásudev Náráyan...	D.
Sahasrabudhe, Vásudev Ganesh	F.G.A.
Sángle, Anant Máruti	F.G.A.
Sáthe, Vishvanáth Náráyan	St. X. & D
Subhedár, Raghunáth Sitárám	D.
Syed, Achartlál Jivanlál	G.C.
Thakar, Uttamrám Dhirajrám	F.G.A.
Trivedi, Trikamlál Dámodar	E. & F.G.A.
Vakil, Shápurji Jehángier	F.G.A.
Váchá, Dorábji Hirjibhái	E.
Vijayakar, Nánuji Harischandra	E.

Undergraduates and others who have passed the Previous Examination.

1880. *December.*

First Class.

Banhatti, Náráyan Dáso	E.
Deshmukh, Moreshvar Gopál	E.

Second Class.

Arkátkar, Shankar Balvantráo	E.
Bákre, Vishnu Vináyak	E.
Barodiá, Dolat Purshottam...	G. C.
Bhardi, Hanmant Rámchandra	D.
Bohorá, Mansukhlál Devchand	G.C.&E.
Dábholkar, Gopál Rámchandra	G.C.
Dávar, Mervánji Shávaksháh	E.
Devbhánkar, Raghunáth Váman	D.
Devdhar, Maheshvar Náráyan	St.X.
Dias, Erasmo Xavier	St.X.
Gajjar, Tribhuvandás Kalliándás	E.
Gupte, Vináyak Apáji	E.
Herlekar, Vishvanáth Mahádev	E.
Jagtiáni, Bulchand Kodumal	E.
Jayakar, Anandráo Rámchandra	St.X.
Joshi, Sakhárám Ganesh	D.
Kángá, Pestanji Mánikji	St.X.

Khándekar, Shankar Dattátraya	R.C. & D.
Koppikar, Sheshgiri Rámchandra	...F.G.A.
Kutár, Bejanji Navroji	... St.X.
Mangalvedhekar, Rájeráo Vithal	... D.
Modak, Gopál Trimbak	... D.
Mule, Gangádhar Bálkrishna	... E.
Nánávati, Hormasji Adarji...	.. G.C.
Pandit, Dattátraya Moreshvar —	... D.
Pátankar, Parshurám Náráyan	... D.
Patvardhan, Gajánan Bháskar	— D.
Poredi, Sayáji Shiváji	... D.
Ránáde, Vishvanáth Balvant	... D.
Setálvád, Chimanlál Harilál	... E.
Tyabji, Hyder Kamrudin	... E.
Vakhárkar, Bháskar Lakshuman	... E.
Wágle, Bháu Mangesh	St.X. & E.
Yájnik, Mádhavlál Javerilál	... E.

Pass.

Adhyáru, Morárji Náráyanji	... G.C.
Anandkar, Yashvant Nilkanth	... E.
Bakshi, Venkat Rághavendra	...F.G.A.
Bálsekar, Manjáppá Nilkanth	...F.G A.
Bhájiválá, Mánikji Limji	... E.
Bhat, Mahádev Váman	... D.
Bhátkhande, Vishnu Náráyan	... E.
Chándekar, Vásudev Vithal	... E.
Dharádhar, Rámchandra Rághobá...	... E.
Dnyáni, Harsukrái Trimbakrái	... E.
Godbole, Rámchandra Ballál	... D.
Iráni, Kaikhosru Tirandoz	...F.G.A.
Jayavant, Rámchandra Bháskar	... E.
Joglekar, Keshav Rámchandra	... D.
Joshi, Mahádev Dinkar	... D.
Kamatnurkar, Ganesh Rámchandra	... D.
Kángá, Pestanji Kávasji	...St. X.
Khandáláválá, Bhukandás Chunilál	... E.
Kharé, Purshottam Parshurám	... D.
Khot, Krishnáji Venkáji	...F. G. A.
Limayé, Purshottam Raghunáth	... E.
Máli, Keshav Govind	... D.
Modi, Kalliándás Keshavdás	... E.
Moghe, Gangádhar Náráyan	...F. G. A.
Nimonkar, Mahádev Rámchandra...	... E.
Nimachválá, Jehángier Dorábji	... E.
Pahlájáni, Shivandás Lálsing	... E.
Pandit, Ráoji Parshurám	... D.
Panthaki, Kaikhosru Kekobád	... E

Parchure, Sádáshiv Gopál ... ... D.
Pochá, Ardesir Bápuji ... ... E.
Sanzgire, Jagannáth Sundarráo ... ... E.
Sheth, Sárábhái Maganbhái ... ... G. C. & St. X.
Sutáriá, Javerbhái Garbadbhái ... . E. & F. G. A.
Todankar, Rámchandra Bhágoji ... ... F. G. A.
Trivedi, Durgeshvar Natvarji ... ... E.
Vaidya, Mahádev Parshurám ... ... D.
Varlikar, Moréshvar Ráoji .. .. E.
Vijayakar, Shripat Khanderáo ... ... E.
Wádiá, Jamshedji Rastamji ... . E.
Wágle, Ganpatráo Raghunáth ... ... St. X.

1881.

First Class.

Billimoriá, Ardesir Jamshedji ... ... E.
Pádsháh, Barjorji Jámásji ... ... E.

Second Class.

Apte, Raghunáth Náráyan ... ... R.C.
Arte, Bháskar Rámchandra ... ... F.G.A.
Dátár, Hanumant Rámráo ... ... R.C.
Kirkire, Krishnáji Hari ... ... E.
Mehtá, Dárásháh Bejanji ... ... St.X.
Penthe, Náráyan Chintáman ... ... D.
Sabnis, Rámchandra Ghanashám ... ... St.X.
Saklátválá, Jamshedji Edalji ... ... E.

Pass.

Bámboatválá, Dádábhái Adarji ... ... E.
Banáji, Sorábji Shávaksháh ... ...F.G.A.
Bhátavadekar, Ganpat Keshav ... ...F.G.A.
Bhátavadekar, Purshottam Hari ... ... D.
Boyce, Bamanji Rastamji ... ... E.
Chitnis, Shankar Mádhav ... ... E.
Dalál, Chunilál Jivandás ... ...F.G.A.
Dáikle, Mahádev Gangádhar ... ... E.
Damniá, Ranchhoddás Lálbhái ... ... St.X.
Desái, Amidhar Ranchhodji ... ... G.C.
Deshpánde, Dámodar Lakshuman ... ... D.
Dhekne, Bápu Náráyan ... ... D.
Dhurandhar, Gajánan Vishvanáth ... ... R.C.
Dugal, Bháskar Rámchandra ... ... D.
Fazhyder, Ali Asgar bin Háji Hassan ... ... E.
Gádgil, Parshurám Hari ... ... D.

Gobhái, Mánikji Kávasji ...	...E.
Gokhale, Rámchandra Hari	...E.
Hardikar, Chintáman Krishna	...D.
Joshi, Purshottam Nilkanth	F.G.A.
Kále, Vishnu Shripat ...	. D.
Kalsulkar, Trimbak Vithal	...D.
Ketkar, Keshav Sadáshiv ...	...D.
Kirtane, Rámchandra Trimbak	R.C.
Kolá, Hiráji Kávasji ...	...E.
Kulkarni, Mangesh Anant	...E.
Lele, Gangádhar Váman ..	...D.
Mantri, Káshináth Janárdan	...E.
Master, Manchersháh Bamanji	St.X.
Mehtá, Dámubhái Dáyábhái	...E.
Mehtá, Rastamji Mervánji	F.G.A.
Munshi, Kaikhosru Ardesir	St.X.
Munshi, Mohanlál Dolatrái	...E.
Nagarválá, Jamshedji Navroji	..D.
Náik, Bhimbhái Jivanji ...	...E.
Ozá, Mánshankar Parmánandás	...E.
Pádhye, Dámodar Ganesh	...E.
Pandiá, Hárisukhrám Panditrám	...E.
Pandit, Atmárám Vishnu...	St.X.
Paránjapye, Hari Rámchandra	...D.
Párnáik, Náráyan Abáji ...	F.G.A.
Parvatikar, Rámchandra Krishna	...D.
Páthak, Rastamji Hormasji	...E.
Patel, Bápuji Sorábji ...	...E.
Patel, Dorábji Mánikji	F.G.A.
Patvardhan, Raghunáth Krishna ...	F.G.A.
Patvardhan, Rámchandra Trimbak	...E.
Pleader, Phirozsháh Nasarvánji	St.X.
Rájvade, Vaijanáth Káshináth	F.G.A.
Ráná, Frámji Ardesir ...	St.X.
Rele, Shántárám Ganesh	St.X.
Sabnis, Náráyan Ghanashám	St.X.
Saklátvála, Mervánji Nánábhái	F.G.A.
Sapre, Vishnu Vináyak ...	F.G.A.
Shende, Ganesh Raghunáth	F.G.A.
Thákor, Manilál Ajitrái ...	G.C.
Tejáni, Muhámmad Hásam ...	...E.
Vargharkar, Jacob Bápuji ..	F.G.A.
Vaziráni, Tahilrám Khemchand	.. E.
Warden, Behrámji Hirjibhái	St.X.
Záte, Mahádev Rangnáth ...	F.G.A.

UNDERGRADUATES AND OTHERS WHO HAVE PASSED THE FIRST EXAMINATION IN MEDICINE.

1864.

Second Division.

DaCunha, Joseph Gerson ... ... G.
Gomes, Antonio Simplicio ... ... G.

1872.

Second Division.

Bennett, Bejanji Pestanji ... ... G.
Coutinho, Joaquim Vicente .. .. G.
Patvardhan, Vináyak Rámchandra ... ... G.

1873.

Second Division.

Khambátá, Hiráji Jehángier ... ... G.

1874.

Second Division.

Alvares, Nicoláo Santanna ... ... G.
DaSilva, Pascoal Manoel ... . G.
Koyáji, Behrámji Nasarvánji ... ... G.
Mulán, Sorábji Pálanji ... ... G.

1875.

Second Division.

Dámlá, Edalji Mánikji ... ... G.
DeLima, Jose Turtulhano .. .. G.
Doctor, Hormasji Behrámji... ... ... G.
Ghándhi, Dámodardás Dharamdás ... ... G.
Kanga, Jamshedji Kharshedji ... ... G.

1876.

Second Division.

Contractor, Hormasji Navroji ... . G.
Dastur, Jámásji Sorábji ... ... G.
Forbes, Edalji Behrámji ... ... G.
Hakim, Hormasji Mervánji... ... ... G.
Nánávati, Jamnádás Premchand ... ... G.

Pesikáká, Hormasji Dosábhái ... ... G.
Punáválá, Edalji Sorábji ... ... G.

1877

Second Division.

Hakim, Phirozesháh Mervánji ... ... G.
Modi, Nánábhái Kuvarji ... ... G.

1878.

Second Division.

Colaço, Joseph ... ... G.
Daruválá, Hormasji Sorábji ... ... G.
Pinto, Diogo John ... ... G.
Sukhiá, Jehángier Kharshedji ... ... G.

1879.

First Division.

Káji, Chhaganlál Gulábdás ... ... G.
Sángle, Davlat Máruti ... ... G.

Second Division.

Abádán, Sorábji Nasarvánji ... ... G.
Amariá, Frámji Mánikji ... . G.
Bábre, Sakhárám Rághobá ... . G.
Bhat, Maganlál Umiáshankar ... ... G.
Davlatjádá, Surajlál Mathurádás ... ... G.
D'Monte, Dominick ... ... G.
Dubásh, Jehángier Bamanji ... ... G.
Fernandez, Ambrozio Feleciano ... ... G.
Jones, Maurice F. ... ... G.
Kámle, Keshav Gopál ... ... G.
Laskari, Rastamji Nasarvánji ... ... G.
Luis, Daniel Conceição ... ... G.
Pochá, Jamshedji Pocháji ... ... G.
Sethná, Ardesir Hormasji ... ... G.

1880.

First Division.

Aquino, Thomas Hannibal ... ... G.
Brown, Edwin Harold ... ... G.
Dixon, Govind Mulji ... ... G.
Kátrak, Nánábhái Navroji ... ... G.

Second Division.

Atchutráo, P. S. ... ... G.
Bharuchá, Mervánji Kuvarji ... ... G.

Bocarro, John... ... ... G.
Dádarkar, Bhavánishankar Bálkrishna ... ... G.
Khándválá, Tuljárám Chunilál ... ... G.
Kutár, Rastamji Pálanji ... ... G.
Mirzá, Jáfarkuli Fraidunbeg ... ... G.
Narimán, Pestanji Bhikáji ... ... G.
Nilkanth, Anubhái Mahipatrám ... ... G.
Penti, Jehángier Mánikji ... ... G.
Pinto, J. Orphino ... ... G.
Poyntz, John William Walter ... ... G.
Sahiár, Kharshedji Navroji ... ... G.
Santuk, Kharshedji Santukji ... ... G.
Sukhiá, Nádarsháh Hormasji ... ... G.
Unválá, Jamshedji Bhikáji ... ... G.
Velkar, Atmárám Vásudev ... ... G.

1881.

First Division.

Bhátavadekar, Mahádev Hari ... ... G.
Chokshi, Nasarvánji Hormasji ... ... G.
DeAttaides, Francis ... ... G.
Narimán, Sorábji Kharshedji ... ... G.

Second Division.

Bansháh, Nasarvánji Frámji ... ... G.
Barve, Shridhar Sakhárám ... ... G.
Bátliválá, Kávasji Mothábhái ... ... G.
Bopardikar, Gangádhar Gopál ... ... G.
Doctor, Jehángier Barjorji ... ... G.
Gordon, Herbert Leslie ... ... G.
Hall, Robert John Draper ... ... G.
Henriques, Felix ... ... G.
Kátrak, Dosábhái Hormasji ... ... G.
Kharás, Kávasji Jehángier ... ... G.
Lálkáká, Kávasji Kharshedji ... ... G.
Mehtá, Anantrái Náthji ... ... G.
Mehtá, Mahipatrám Govindrám ... ... G.
Nicolson, Jijibhái Pestanji ... ... G.
Patel, Dhanjibhái Hirjibhái ... ... G.
Pednekar, Krishna Sakhárám ... ... G.
Sátpute, Náráyan Raghunáth ... ... G.
Sett, Mirjibhái Rastamji ... ... G.
Spencer, Kaikhosru Nánábhái ... ... G.

UNDERGRADUATES AND OTHERS WHO HAVE PASSED THE FIRST EXAMINATION IN CIVIL ENGINEERING.

1866.

Second Division.

Dátár, Náro Govind .. .. P.E.

1868.

Second Division.

Mehtá, Venishankar Govindrám ... ... P.E.
Shirgávkar, Báláji Náráyan ... ... P.E.

1869.

Second Division.

Bhat, Moréshvar Náráyan ... ... P.E.
Soman, Ganesh Náráyan ... ... P.E.

1870.

Second Division.

Gupte, Pándurang Gopál ... ... P.E.
Jámbhekar, Balvant Govind ... ... P.E.
Narimán, Gustádji Dorábji ... ... P.E.
Támbe, Rámchandra Balvant ... ... P.E.

1871.

Second Division.

Bhátavadekar, Vináyak Krishna ... ... P.E.
Chavbal, Káshináth Dámodar ... ... P.E.
Mhaiskar, Gopál Raghunáth ... ... P.E.
Mulekar, Vishnu Sadáshiv ... . P.E.
Varlikar, Mahádev Janárdan ... ... P.E.

1872.

First Division.

Macnee, Henry Charles ... ... P.E.

Second Division.

Bhándárkar, Ráoji Ganesh ... ... P.E.
Nárgir, Shankar Bisto ... ... P.E.
Whittell, Charles ... ... P.E.

1873.

First Division.

Page, Hastings Montague ... ... P.E.
Parikh, Javerdás Bhogidás... ... ... P.E.
Sohoni, Vásudev Sadáshiv ... ... P.E.

Second Division.

Kolatkar, Sitárám Vásudev ... ... P.E.
Tarkhadkar, Vithal Rághobá ... ... P.E.

1874.

Second Division.

Barve, Pándurang Sakhárám ... ... P.E.
Bhosekar, Lakshuman Pándurang ... ... P.E.
Mánde, Venkatesh Bápuráo ... ... P.E.
Mehendale, Pándurang Káshináth ... ... P.E.
Oka, Vináyak Anant ... ... P.E.
Thákur, Atmárám Sadáshiv ... ... P.E.

1875.

First Division.

Barve, Náráyan Vishnu ... ... P.E.
Lele, Trimbak Balvant ... ... P.R.
Savage, Thomas .. .. P.E.

Second Division.

Bhágvat, Rámchandra Ganesh ... ... P.E.
Joshi, Anáji Anant ... ... P.E.
Káthavate, Narhar Vishnu... ... ... P.E.
Mehtá, Lallubhái Govandás ... ... P.E.

1876.

First Division.

Cousens, Henry ... ... P.E.
Deshpánde, Sitárám Keshav ... ... P.E
Gokhalé, Vináyak Hari ... ... P.E.

Second Division.

Hemson, Reginald John ... ... P.E.
Párkhe, Eknáth Yashvant ... ... P.E.

1877.

Second Class.

Mitra, Haripad ... ... P.E.

Pass.

Chelá, Chunilál Khubchand ... ... P.E.
Dalál, Pránjivan Parbhudás ... ... P.E.
Majmudár, Dipakrám Navnitrám ... ... P.E.
Munshi, Dádábhái Kharshedji ... ... P.E.

1878.

Second Class.

Chirmule, Vishnu Anant ... ... P.E.

Pass.

Alekar, Rámchandra Keshav ... ... P.E.
Ashirkar, Lakshuman Mahipat ... ... P.E.
Lohár, Máruti Hari .. .. P.E.
Mádan, Edalji Hormasji . ... P.E.
Thatte, Bhálchandra Chintáman ... ... P.E.

1879.

First Class.

Hatyangdikar, Santáppá Santáyá .. .. P.E.
*Muligan, William George ... ... P.E.

Second Class.

Desái, Khusháldás Revádás ... ... P.E.
Gidváni, Ayedás Izatrám ... ... P.E.
Gole, Vishnu Vithal ... ... P.E.
O'Sullivan, James John ... ... P.E.
Rishi, Gopál Bálkrishna ... ... P.E.
Rowe, William F. .. .. P.E.

Pass.

Bámji, Mánikji Kávasji ... ... P.E.
Bhaválkar, Balvant Keshav ... ... P.E.
Bhaválkar, Mártand Váman ... ... P.E.
Dhurandhar, Rámchandra Vishvanáth ... ... P.E.
Shirurkar, Shántmurti Annáppá . ... P.E.
Tádiválá, Ardesir Hormasji ... ... P.E.
Tipnis, Ganesh Khanderáo ... ... P.E.

1880.

First Class.

Ahmadi, Ibráhim Sheik Daud ... ... C.Sc.
Kátre, Mangeshráo ... ... C.Sc.

Second Class.

Dáji, Sorábji Jamshedji ... ... C.Sc.
Dev, Váman Náráyan ... ... C.Sc.
Gokhale, Gangádhar Sadáshiv ... ... C.Sc.
Joshi, Náráyan Janárdan ... ... C.Sc.
Kátrak, Navroji Hormasji ... . C.Sc.

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* Passed the L.C.E Examination. 1881

Kátre, Narsingráo ... ... C.Sc.
Mádan, Rastamji Hormasji ... ... C.Sc.
Mansukháni, Hemandás Tejumal ... ... C.Sc.
Patel, Ardesir Kávasji ... ... C.Sc.
Yatgiri, Subráo Venkatesh ... ... C.Sc.

Pass.

Abhyánkar, Pándurang Vishnu ... ... C.Sc.
Abhyánkar, Váman Vishnu ... ... C.Sc.
Apte, Gangádhar Ballál ... ... C.Sc.
Bhándáre, Hari Bhikáji ... ... C.Sc.
Carvalho, Rudolph . ... C.Sc
Dalál, Kilábhái Dulabhrám.. ... ... C.Sc.
Dalál, Nasarvánji Mancherji ... ... C.Sc.
Dastur, Peshutan Hormasji ... ... C.Sc.
Deshpánde, Balvant Ganesh ... ... C.Sc.
Divechá, Vanmáli Mulji ... ... C.Sc.
Kotvál, Hormasji Jamshedji ... ... C.Sc.
Kunte, Vásudev Keshav ... ... C.Sc.
Mistri, Kharshedji Hormasji ... ... C.Sc.

1881.

First Class.

Sháh, Bháilál Purshottamdás ... ... C.Sc.
Visvesvaraiyá, Mokshagundam ... ... C.Sc.

Second Class.

Anandatirtha Ráo, Mádhav Ráo ... ... C.Sc.
Chhápgar, Kharshedji Frámji ... ... C.Sc.
Joshi, Moro Govind ... ... C.Sc.
Joshi, Narso Govind... ... ... C.Sc.
Thánáválá, Ardesir Nasarvánji ... ... C.Sc
Varanásivár, Sitárám Sambasio ... ... C.Sc.

Pass.

Billimoriá, Jehángier Mancherji ... ... C.Sc.
Dáte, Vithal Bálkrishna ... ... C.Sc.
Garde, Náráyan Dattátraya... ... ... C.Sc.
Joshi, Krishnáji Vishnu .. .. C.Sc.
Sátárávála, Nánábhái Dádábhái ... ... C.Sc.
Sethná, Kávasji Bejanji .. .. C Sc.
Vyás, Gavrishankar Harjivandás ... ... C.Sc.

MATRICULATION EXAMINATION, 1881.

Rank.	Names of Candidates.	Schools.
1	Parmánand, Jagannáth Náráyan	E S.
2	Noronha, Crispin	St. M.
3	Jozhi, Narhar Bálkrishna	R. M.
	Sováni, Govind Krishna	R.
5	Ráshinkar, Vishnu Krishna	R.
6	Bhardá, Bhikáji Dorábji	Kát.
	Khánzode, Ambádás Ráoji	Am.
8	Desái, Gulábbhái Vasanji	E. S.
9	Pádsháh, Pestanji Jámásji	B. Pro.
10	Sule, Bálkrishna Govind	Ak.
11	Nátu, Vishnu Raghunáth	B.
12	Reuben, Ezra	R. M.
13	Parchure, Vináyak Náro	P.
14	Mehtá, Náranji Kuvarji	Sur.
15	Lenahan, Herbert Thomas	Sc.
16	Karve, Dhondo Keshav...	R. M.
17	Mehtá, Lashmilál Gunvantrám	A.
18	Mehtá, Gokaldás Rájpál	Kát.
19	Patel, Rámgovind Lálbhái	E. S.
20	Bodas, Lakshuman Chintáman	N. E.
	Mahátre, Atmárám Náráyan	E. S.
22	Gádgil, Sadáshiv Bápu	P.
23	Sethná, Dárásháh Shápurji	A.
24	Chandirámáni, Madandás Dhanrájmal ..	H.
25	Kelusker, Krishnáji Arjun	F. G. A.
26	Corkery, Emily	St. M., P.
27	Bháleráo, Eknáth Vithal	Dhu.
28	Betigiri, Svámi Narhar...	Dh.
29	Kulkarni, Eknáth Subráo	R.
30	Oka, Gopináth Vináyak	F. G. A.
	Pátkar, Dámodar Raghunáth	P
32	Pingle, Mádhávráo Morobá	E. S.
33	Mávalankar, Vásudev Keshav ...	St. M.
34	Vaishampáyan, Vásudev Ganesh	Dh.
	Valsárá, Mancherji Bamanji	E. S.
36	Agáskar, Bálkrishna Vináyak	St. M.
37	Barve, Váman Náráyan...	P.
38	Khádilkar, Rámchandra Krishna	A. V. M.
	Nisal, Shivrám Náráyan	Ah.

Rank.	Names of Candidates.	Schools.
40	Patvardhan, Ganesh Viná́yak...	R.
41	Mehtá, Mancherji Fardunji	St. M.
42	Mehtá, Dinsháh Fardunji	E. S.
43	Vaishnav, Jayaprasád Hariprasád	B.S. &P.T.
44	Apte, Chintáman Náráyan	N. E.
	Májgávkar, Bálkrishna Rango...	S.
46	Astekar, Rámchandra Gopál	B. S.
47	Kutár, Rastamji Navroji	E. S.
48	Dev, Vishnu Sitárám	B. S.
	Millard, Alfred	Sc.
	Válávalikar, Pándurang Báburáo	R.
	Vijayakar, Dinkar Khanderáo	St. M.
52	DeMello, Ignatius	St. M.
	Váknis, Dinkar Hari	S.
54	Kulkarni, Rámchandra Shrinivás	B.
55	Vaze, Lakshuman Ballál	R.
56	Bhágvat, Sakhárám Keshav	Rat.
57	Koyáji, Harmasdyár Kuvarji	Kat.
58	Chhabriá, Rádhákisandás Notandás	Sh. & P. T
	Desái, Edalji Jamáspji	P. T.
	Halbe, Rámchandra Káshináth	B.
61	Anjáriá, Ravishankar Ganesh...	Kát.
62	Pánsare, Mahádev Krishna	G. A.
63	Mudivedkar, Shrinivás Rájeráo	R.
64	Másiná, Hormasji Mánikji	Sir J.
65	Jayakar, Vináyakráo Jagannáth	G. A.
	Nákhye, Gopál Bhikáji...	R.
67	Jayavant, Bháskar Lakshuman	E. S.
68	Lándge, Balvant Rámchandra...	Am.
69	Taná, Morárji Anandji	E. S.
	Ward, Cecilia Katherine	Sc.
71	Whitcombe, Earnest Gerald Robert	Bis.
72	Modak, Rámchandra Váman	P.
73	Kulkarni, Sakhárám Báji	R.
74	Rupji, Rámnáth Bhái	E. S.
75	Chirmule, Vásudev Ganesh	S.
76	Dholkiá, Manishankar Sadáshankar	Bk.
77	Fenwick, Arthur	Bis.
	Máláp̄ur, Rámchandra Svámiráo	Dh.
79	Vaidya, Pránshankar Govrishankar	F. G. A.
80	Keess, Robert George	Bis.
	Kershaw, Louis	St. M.

Rank.	Names of Candidates.	Schools.
82	Conway, Minna May	G. M.
	Gursing, Shivanmal Nanmal	N. J.
	Sonár, Gopál Thamáji	N. S.
85	Vyás, Rághavji Jayakrishna	R. M.
86	Potnis, Bháu Balvant	B.
87	Harite, Sadáshiv Venkatráman	K.
	Shaw, Thomas Michael	G. K.
	Úpádhye, Káshináth Vishnu	N. S.
90	Abhyánkar, Moreshvar Pándurang	Dh.
	Hall, Ellon	St. M., P
92	Makávaná, Hirálál Mulji	S. M.
	Shivdásáni, Tahilrám Lilárám	P. T.
94	Kulkarni, Appáji Rámchandra	Dh.
95	Bodas, Moreshvar Ganesh	R. M.
96	Joshi, Vishnu Trimbak...	N. S.
97	Bháte, Vithal Bálkrishna	B.
98	Philips, Master James	St. M.
99	Maun, Hakimchand Khushálchand	Kát.
	Yatgiri, Krishnáji Venkatesh	B.
101	Gulrájáni, Partábrái Manghirsing	H.
102	Tikle, Nátu Shrikrishna	P.
103	Pradhán, Keshav Vithal	F. G. A.
104	Joshi, Rámchandra Dinkar	B.
	Kundanmaláni, Lálchand Hásmal	N. J. & H.
	Lena, Sorábji	P. V.
	Vyás, Jatáshankar Dayárám	A.
108	Angal, Balvant Rámchandra	P. T.
	Bijurkar, Vithal Krishna	E. S.
110	Kámdin, Kaikhosru Aspandiárji	Br.
111	Desái, Hirálál Motilál	A.
112	Belsare, Khandubhái Bhikáji	Bk.
113	Ward, Samuel	Sc.
114	Athavale, Janárdan Sadáshiv	Dh.
	Merchant, Dvárkádás Dharamsi	E. S.
	Shaháni, Kotumal Nribsing	P. T.
117	Joshi, Shridhar Ganesh . ..	P. & P. T.
	Modak, Sháhu Rámkrishna	Ah.
119	Vánurkar, Malhár Krishna	B.
120	Khárodá, Durgáprasád Lakshmidás	Bk.
	Oza, Shambhuprasád Vajeshankar	P. T.
	Seth, Mulchand Jivan	Su.
123	Mandlik, Shivrám Gangádhar...	E. S.
	Sanjáná, Barjorji Jamshedji	Sir J.

Rank.	Names of Candidates.	Schools.
125	Patel, Govind Appáji	B. S.
	Vakil, Hardevrám Nánábhái	E. S.
	Dowling, Aloysius	St M.
128	Kále, Moreshvar Rámchandra	Sáv.
129	Mehtá, Chunilál Jethábhái	N.
	Mehtá, Pránjivan Jagjivan	Kát.
	Pradhán, Náráyan Yashvant	P. T.
132	Diván, Vajerám Sákerrám	St. M.
	Málvankar, Váman Káshináth	E. S.
	Sahasrabudhe, Trimbak Sakhárám	P.
135	Gándhi, Chunilal Gulábdás	Su. M & N
	Konur, Shesho Janárdan	B.
137	Gáikavád, Khanderáo Appásáheb	R.
	Karnik, Krishnaráo Balvant	A.
137a	Jamsetji, Cursetjee Jamsetjee	P. T.
139	Irvine, Arthur Adeylotte	Bis.
140	Kalliánpur, Náráyan Venkatesh	R. M.
141	Mehtá, Umedrám Jametrám	A. & P. T
	Waite, Thomas John	J. C.
143	Bhidé, Vishnu Vithal	B. A. V.
	Dándekar, Bápuji Trimbak	P.
	Gadre, Ganesh Váman	E. S.
	Gándhi, Manilál Bápálál	P. T.
	Joshi, Pitámbar Krishna	Dh.
	Maráthe, Krishnáji Dhondo	R.
149	Richardson, Mary	St. M., P.
150	Agaláve, Shankarráo Mádhavráo	Su.
151	Gokhale, Gopál Krishnáji	R.
152	Moulvi, Sirájudin Abdul Fattá	E. S.
153	Dalál, Jagjivandás Jugaldás	F.
	Doctor, Kharshedji Behrámji	Su.
	Maráthe, Govind Krishna	B.
156	Adarianválá, Hormasji Dorábji	Sir J.
	Majmundár, Mathurbhái Ishvarlál	N. & P. T.
158	Trivedi, Manjubhái Bhavánilál	A.
159	Gulráján, Mohanlál Manghirsing	H.
	Punegar, Nasarvánji Edalji	F.
161	Wilson, Stephen...	G. K.
162	Lálá, Kaikhosru Barjorji	Sir J.
	Mugad, Mádhav Annáji	Dh.

Rank.	Names of Candidates.	Schools.
164	Cabral, Valentine St. John	St. M.
	Joglekar, Purshottam Náráyan	P. M.
	Kaikini, Shankar Krishnáji	E. S. & P. T
	Kulkarni, Janárdan Eknáth	R.
168	Trivedi, Tanmanshankar Ratanshankar ..	Su.
169	Dáte, Purshottam Ganesh	E. S.
170	Anigiri, Hanmant Shrinivásráo	B.
	Moise, John Henry	St. M.
	Joshi, David Lucas	N. S.
	Pandit, Anandráo Vishvanáth	F G.A.&P.T
174	Joshi, Jayshankar Premánand	Br.
175	Mehtá, Motichand Javer	Bh.
176	Rájváde, Vishvanáth Káshináth	P.T.
177	Gidadahubli, Hanmant Bhimráo	Dh.
	Pádhye, Dattátraya Keshav	R.
	Pátil, Hari Lakshuman	E. S.
180	Spencer, Frederick Daly	Sc.
	Doctor, Frámji Pestanji	B. Pro.
182	Commissariválá, Jehángier Kharshedji	B. Pro.
	DeSouza, Frank	P. T.
	Divekar, Hari Mahádev	P.
	Kharvandikar, Náráyan Váman	N. E.
186	Alvares, Dominic Blaize	St. M.
	Bápat, Gopál Váman	Am.
	Sámant, Námdev Vithal	E. S.
189	Soman, Keshav Vásudev	P. T.
190	Gádgil, Shridhar Keshav	B.
	Khárkar, Vásudev Mádhavráo...	Br.
	Sadávarte, Mártand Balvant	B S.&N.S
	Soman, Rámchandra Trimbak	Ah.
194	Nigudkar, Gopál Dhonddev	P.
	Palnitkar, Ganesh Hari	P. T.
	Shánbág, Krishna Upendra	P. T.
197	Eslam Charles	Sc.
198	Lele, Rámchandra Sadáshiv	Ah.
	Parghi, Jaysukhrám Lakshmirám	Kát.
200	Chilakvádkar, Venkatesh Shiváji	Dh.
	Parándekar, Vásudev Ráoji	R.
202	Valladares, Luis Angelino	St. M.
	Ráje, Shivrám Keshav	P.
204	Khote, Sundarnáth Dinánáth	E. S.
	Shrikhande, Govind Vináyak	R.
	Támbe, Ganesh Krishna	B. S.

Rank.	Names of Candidates.	Schools.
207	Gándhi, Sorábji Fardunji	E. S.
	Khanderiá,, Jivanlál Dungarshi	Kát.
	Mehtá, Harpatrám Harmukhrám	P. T.
	Velhánkar, Bálkrishna Narhar	Dhu.
211	Chavbal, Nilkanth Bháskar	E. S.
	Karáni, Násarvánji Dhanjibhái	B. Alf.
	Khare, Vishnu Vináyak	Dh.
214	Mehtá, Hormasji Nasarvánji	Sir J.
215	Dalál, Trimbaklál Tribhuvandás	E. S.
	Kalliánválá, Navroji Kávasji	E. S.
	Kángá, Kaikhosru Kávasji	E. S.
218	Vángikar, Annáji Ganesh	S.
219	Britto, Alexander	P.T.
	Dhámankar, Trimbak Keshav...	P.
	Mirchandáni, Gangárám Rijhumal	H.M.
	Mirzá, Najafkuli Fredunbeg	N.J.
	Paránjapye, Hari Krishna	N.E.
	Sherdiyálá, Fardunji Edalji	Su.M.
225	Trivedi, Dulabhji Narshi	Bh.
226	Abhyánkar, Sakhárám Vishnu	S.
	Billimoriá, Hormasji Rastamji	P.
	Dánge, Vishnu Náráyan	Ah.
	Jardosh, Harikisandás Motirám	Su.
	Kothári, Narbherám Karamchand	Kát.
231	Bijbádiá, Javerilál Chandreshvar	P. T.
232	Bharde, Shivrám Eknáth	E. S.
	Hyams, Abraham S	Bis.
234	Desái, Chunilál Purshottamdás	A.
	Dhámangávkar, Narhar Náráyan	P. T.
236	Korgávkar, Káshináth Rámkrishna	F.G. A.
	Pandit, Vásudev Vináyak	Br.
	Patel, Chunilál Kákubhái	A.
239	Bágulkotkar, Hanmant Shesho	B. M
	Desái, Khandubhái Lallubhái...	Su.M &P.T.
	Koyáji, Koyáji Nasarvánji	Sir J.
	Nánji, Ratanji Mancherji	Sir J.
	Sunthankar, Chintáman Raghunáth	B.
244	Atgur, Rámchandra Pándurang	Dh.
	Belari, Krishnaráo Rámayá	K.
	Shelat, Maganlál Govindrám	A.
247	Puránik, Shridhar Govind	N.

Rank.	Names of Candidates.	Schools.
248	Betdur, Balvant Mahádev	P. T.
	Deshmukh, Vishnu Keshavráo	P.
	Deshpánde, Krishnáji Rámchandra	B. M.
	Mhátre, Váman Janárdan	P. T.
	Názar, Jálbhái Dinsháh	N. J.
	Parikh, Trikamlál Narottamdás	A.
	Tádpatri, Mádhav Bálkrishna...	Dh.
	Wágle, Mahádev Bálkrishna	St. M.
256	Nagarkar, Dámodar Ganesh	P.
	Talpade, Vasantráo Náráyan	St. M.
	Vaidya, Ratanlál Bhogilál	A. & P.T.
259	Boyce, Kharshedji Pestanji	F.
	Ráje, Náráyan Vináyak	P. T.
261	Mehtá, Chhaganrám Astikrám	E. S.
262	Chitale, Vithal Vishnu...	1.
	Pandit, Anant Mahádev	Kát.
	Pitale, Vámanráo Dámodarji	F. G. A.
	Shroff, Lakshmidás Nagindás	E. S.
	Vader, Hari Nágesh	P. T.
267	Chokshi, Kaikhosru Dádábhái	B. Pro.
	Hodiválá, Shápurshah Hormasji	Sir C.
	Kotvál, Govind Sitárám	Br.&P.T.
	Mehtá, Ratanshankar Girjáshankar	P. T.
271	Mehtá, Bápuji Rastamji	Ch.
272	Vyavahárkar, Moreshvar Hádhavráo ..	F.G.A.
273	Doctor, Jehángier Edalji	St. M.
	Seth, Sárábhái Maganbhái	P. T.
275	Laskari, Hormasji Bápuji	B. Pro.
	Paránjapye, Pándurang Lakshuman	H. &N.J.
277	Chuváválá, Krishnalál Ranchhod	Ah. M.
278	Dámle, Bháu Krishna	P.
	Karandikar, Keshav Báburáo	B.
280	Dowling, Stanislaus	St. M.
	Gorodhá, Bhavánidás Manji	Bk.
	Karve, Gopál Krishna	N. S.
283	Shidore, Váman Krishna	P. T.
284	Amládi, Rámráo Sheshgir	R. M.
	Dave, Gulábrái Durgárám	F G.A.&P T
	Desái, Gulábrái Govindrám	Bh.
	Pingle, Káshináth Moreshvar...	F. G. A.

Rank.	Names of Candidates.	Schools.
288	Bhende, Ganpat Gavrobá	R. M.
	Dubal, Keshav Náráyanráo	R.
	Kále, Parshurám Balvant	N. E.
291	Bilgikar, Gururáo Náráyan	B.
	Dalál, Chunilál Fakirbhái	Su. M.
293	Bhágvat, Shivrám Káshináth	B. M.
	Mediválá, Mánikji Kuvarji	B. S.
	Vyás, Shivdat Bápálál	A.
296	Ghárpure, Chintáman Hari	N. S.
297	Bidi, Krishnáji Kamlo	B.
298	Vijayakar, Bábáji Bápuji	E. S.
299	Brown, Grace Caroline	J. C.
	Sahasrabudhe, Bápu Ganesh	Dh.
301	Kulkarni, Rango Venkáji	Dh.
	Kulkarni, Vishnu Sadáshiv	B. M.
303	Khánpur, Rámchandra Trimbal	Dh.
	Shroff, Kaikhosru Dosábhái	Sir J.
	Telang, Mangesh Rámkrishna	P. T.
306	Banáji, Kharshedji Mancherji...	Ind.
307	Avron, Eugene	St. M.
308	Sunáválá, Rastamji Bejanji	F.
	Vakil, Jametrám Jivanrám	E. S.
	Wádiá, Hirjibhái Rustamji	B. Pro.
311	D'Gama, Frederick	N J. &P.T
	Daru, Jamnádás Harjivandás	Su.
	Ghuse, Gopál Rámchandra	B. S.
	Kheniá, Kharshedji Jamshedji —	Sir J.
315	Haveri, Venkatesh Hanmant	B.
	Joshi, Váman Dájı	P. M.
	Limaye, Dattátraya Trimbak	G. A.
	Patvardhan, Krishnájı Hari	F. G. A.
319	Joshi, Gopál Janárdan	P. T.
	Pradhán, Káshináth Bábáji	S.
	Sethná, Rastamji Aspandiárji	A.
322	Ambegávkar, Shankar Keshav	B. S.
	Gokhale, Vishnu Sadáshiv	P.
	Thánevalá, Jehángier Rastamji	F.
325	Prabhu, Krishnáji Sadáshiv	Sáv.
326	Carret, Arthur Anáji	F.G.A.

Rank.	Names of Candidates.	Schools.
327	Kirtikar, Gajánan Atmárám	E. S.
	Majmudár, Bhulábhái Kirpárám	Su. M.
	Masurekar, Vináyak Govind	P.T.
	Ráo, Bápuji Káshináth	E. S.
331	Hasur, Nágendra Varálappá	B. M.
332	Bhátavadekar, Rámchandra Sakhárám ...	P. T.
	Bhidé, Náráyan Vishnu	P.
	Gokhale, Janárdan Ganesh	Kát.
	Mehtá, Dámodardás Karsandás	F.
336	Bagtáni, Revá Rámkakhiámal	N J.
337	Bhágliá, Phirozsháh Dhanjisháh	Su. M.
	Chhatiá, Dámodar Kasandás	Br.
	Gapchup, Hari Váman	P.
	Khárkar, Lakshuman Shivrám	Br.
	Mehtá, Vithaldás Keshavlál	Su.
342	Dátár, Rághavendra Rámchandra	B.
	Modak, Moro Ganesh	R.
	Vaishnav, Bhupatrái Trikamji	Bk.
345	Bahádurji, Ardesir Frámji	E. S.
346	Ránná, Manchersháh Nánábhái	E. S.
347	Joshi, Someshvar Vrijbhukhan	P. T.
	Sethná, Shávakshah Ratanji	F.
349	Humnábádkar, Trimbak Govind	P.
	Kaujalgikar, Govind Yashvant	S.
351	DeSouza, William Blase	St. M.
352	Doctor, Bamanji Behrámji	F.
353	Gháripure, Káshináth Vináyak	P. T.
354	Bál, Pándurang Mahádev	Rat.
	Bharuchá, Ardesir Kávasji	Sir J.
	Bokil, Amrit Mahádev	S.
	Kukáná, Frámji Jamshedji	F.
	Patel, Dáhiábhái Narottamdás	Su.
359	Mehtá, Dalsukhbhái Anantrái...	P. T.
360	Patel, Ambálál Náthábhái	P. T.
361	Jetli, Jametrám Puranrám	N. & P. T.
362	Broker, Shivdás Parmánand	F.
	Shopkeeper, Ratanji Shápurji	F.
364	Ezekiel, Ezekiel Moses...	E. S.
365	Kále, Moro Balvant	B.
	Shukla, Venishankar Reváshankar	Bk.
	Subandh, Báburáo Náráyan	P.
368	Mehtá, Gopálráo Dolatráo	Ah. M.

Rank.	Names of Candidates.	Schools.
369	Pilgávkar, Purshottam Rámchandra	F.
370	Mámá, Hormasji Bhikáji	E.'S.
371	Alekar, Gopál Bápuji	B. S.
	Joshi, Gangádhar Amrit	P.'T.
373	Paránjapye, Vishnu Keshav	P.M.&P.N
374	Mináshválá, Jhenulbhái Ahmedbhái	B Pro&P.T.
375	Jagtiáni, Lekhsing Sáhibsing	H.
	Phanse, Keshav Atmárám	Br.
377	Thadani, Thárumal Tekhchand	H. M.
378	Abhyánkar, Govind Sadáshiv...	S.
	Shukla, Manilál Hariprasád	P. T.
380	Kázi, Gordhandás Nauttamrám	Su.
381	Screwválá, Kharshedji Hormasji	F.
	Dalál, Phirozsháh Mancherji	Sir J.
383	Dhekne, Shridhar Lakshuman	P.
384	Godinho, John Chrysostom	P. T.
385	Devdhar, Purshottam Govind	P. T.
386	Dáji, Hormasji Kharshedji	Ch.
387	Soneji, Makanji Morárji	F. G. A.

XI.

Recognition.

REGULATIONS FOR THE RECOGNITION OF INSTITUTIONS IN THE DIFFERENT FACULTIES.

1. Any College or other Institution desirous of being recognized in any Faculty by the University of Bombay must forward, with its application, the following documents, signed in each case by the responsible authority, and countersigned by two members of the Senate:—

(*a.*) A statement showing the present staff of Instructors and the course of study in the Faculty in which recognition is desired during the last two years, provided the Institution has existed for such a period.

(*b.*) A declaration that the Institution has the means of educating up to the standard of the highest degree in the Faculty in which recognition is desired.

(*c.*) It shall be competent for the Senate, on the recommendation of the Syndicate, to recognize an Institution in any Faculty for the purposes of a particular Examination or Examinations only.

2. By the term Responsible Authority is to be understood the Managing Board in the case of an Institution under such a Board, and the Director of Public Instruction in the case of Government Institutions.

The fact of an Institution having been once recognized in any Faculty by the University, is not to prevent the Senate withdrawing their recognition in that Faculty, in the case of the Institution changing its course of instruction or ceasing to educate up to the University standard.

RECOGNIZED INSTITUTIONS—UNIVERSITIES.

The Universities of Great Britain and Ireland, and of India, in all the Faculties in which Degrees are granted by them respectively.

II.—COLLEGES AND COLLEGIATE INSTITUTIONS RECOGNIZED IN THE DIFFERENT FACULTIES.

I. Elphinstone College, Bombay.
II. Deccan College, Poona ...
III. Free General Assembly's Institution, Bombay ... ... } *In Arts.*
IV. St. Xavier's College, Bombay.

V. Gujarát College, Ahmedábád.
VI. Rájárám College, Kolhápur...
VII. Barodá College ... ... } *For the purposes of the Previous Examination.*

VIII. Government Law School, Bombay. *In Law.*

IX. Grant Medical College, Bombay. *In Medicine; and for the purposes of the Second Examination for the Degree of Bachelor of Science.*

X. College of Science, Poona. *In Civil Engineering; and for the purposes of the First and Second Examinations for the Degree of Bachelor of Science.*

I.—ELPHINSTONE COLLEGE.

(RECOGNIZED 1860.)

Elphinstone College arose by a separation in the year 1856 of the professorial element from the "Elphinstone Institution," which henceforth became a High School.

The Elphinstone Institution had its origin in a meeting of the Bombay Native Education Society on the 22nd August 1827, to consider the most appropriate method of testifying the affectionate and respectful sentiments of the inhabitants of Bombay to the Honourable Mountstuart Elphinstone, on his resignation of the Government of Bombay. The result of this meeting was that a sum of money, amounting to Rs. 2,29,656, was collected by public subscription, towards the endowment of Professorships for teaching the English Language, and the Arts, Sciences, and Literature of Europe, to be denominated the Elphinstone Professorships. This sum afterwards accumulated to Rs. 4,43,901, and the interest of it is augmented by an annual subscription from Government of Rs. 22,000.

In 1863, Cowasjee Jehanghier Readymoney, Esq., Justice of the Peace, Bombay, presented Government with one hundred thousand Rupees towards erecting suitable College Buildings for Elphinstone College, to be called the "Cowasjee Jehanghier Buildings."

In 1864, on account of the rise in the prices of building materials and labour, Mr. Cowasjee Jehanghier added a second sum of one hundred thousand Rupees to his former munificent donation. The Elphinstone College was removed on the 20th of February 1871 to the building on the Parel Road.

The property and endowments of the Elphinstone College are under the guardianship of the Trustees of the Elphinstone Funds. Present Trustees are Sir Mungaldass Nathoobhoy, Knight, C.S.I.; Ráo Sáheb Vishvanáth Náráyan Mandlik, C.S.I.; and Sorábji Shápurji Bengáli, Esq., C.I.E.

The following endowments are connected with the Elphinstone College :—

The West Scholarship Fund, subscribed in 1828, in honour of Chief Justice Sir Edward West.

The Clare Scholarship Fund, subscribed in 1835, in honour of the Earl of Clare, Governor of Bombay.

The Gaikavád Scholarship, established by His Highness the Gaikavád in 1850.

The Bell Prize Fund, subscribed in 1848, as a testimonial to Professor John Bell of the Elphinstone Institution.

The Sundarji Jiváji Prize Fund, established in 1842 by Bábáji Sundarji in memory of his father.

The Rájá of Dhár's Prize Fund, given by the Rájá of Dhár in 1853.

The Ganpatráo Vithal Prize Fund, given in 1854 by Ganpatráo Vithal of Indore.

The Nawáb of Sachin Prize Fund, given in April 1871 by His Highness the Nawáb of Sachin in memory of his fourth son, Sidi Abdul Karim Khán.

The Mountstuart Elphinstone Prize, founded in 1874. This prize consists of Rs. 327-8-0 (the interest on Rs. 7,500 in Government securities) and is annually awarded to the student who passes the Previous Examination with the highest aggregate number of marks and who is certified to be on the rolls of the College.

Scholarships.

The following Scholarships, each tenable for one year, are annually open for competition in the College :—

A.—Senior Scholarships.

For Languages ..	...	10 of Rs. 20 per mensem.
For Mathematics	...	4 of Rs. 20 per mensem.
For Natural Sciences ..		2 of Rs. 20 per mensem.

B.—Junior Scholarships.

1st Class ...	...	10 of Rs. 15 per mensem.
2nd Class ..	..	19 of Rs. 10 per mensem.

A certain number of Undergraduates who are unable to pay the College fee are admitted free.

LIST OF PRINCIPALS.

1845. John Harkness, M.A., LL.D.
1862. Sir Alexander Grant, Bart., M.A.
1866. Kyrle Mitford Chatfield, B.A.
1874. WILLIAM WORDSWORTH, B.A.

1882

Principal.

William Wordsworth, B.A., Oxon., Professor of History and Political Economy.

Professors.

James Thomas Hathornthwaite, M.A., Cantab., Professor of Mathematics.

Peter Peterson, M.A., Edin., B.A., Oxon., Professor of Oriental Languages.

Thomas Brown Kirkham, Professor of English Literature *(on leave to Europe).*

Michael Macmillan, B.A., Oxon., Professor of Logic and Moral Philosophy.

J. Oliver, *Acting* Professor of English Literature,

Mirza Hairat, Professor of Persian.

Isadore Bernadotte Lyon, F.C.S., Professor of Chemistry.

D. MacDonald, M.D., B.Sc., C.M., Professor of Biology.

Kávasji Dádábhái Náegaumválá, M.A., F.C.S., F.I.C., Lecturer in Experimental Physics.

Shástris.

Bhimáchárya bin Rámbhat, Zalakikar.
Rájárám Bhat bin Ganesh Bhat, Bodas.

DAKSHINA FELLOWS.

Seniors.

Vaidya, Chintáman Vináyak, B.A. (Superintendent of Resident Students.)
Athavale, Rámkrishna Sakhárám, B.A. (Librarian).

Juniors.

(1) Wágle, Krishnáji Balvant, B.A.
Bhándárkar, Prabhákar Rámkrishna, B.A.

Honorary Fellows.

(2) Deshmukh, Ganesh Krishna, B.A. ... Elph. Fund.

Drawing Master.

Krishnaráo Bhái.

Gymnastic Master.

Nasarvánji Kávasji.

Senior Scholars.

	Bhárváni, Harchandrái Vishindás, B.A.	Elph. Fund.
	Doctor, Jamshedji Barjorji, B.A.	Clare Fund
	Kángá, Mánikji Kávasji, B.A.	Elph. Fund.
	Kelkar, Hari Váman, B.A.	,,
(3)	Kelkar, Vásudev Bálkrishna, B.A.	,,
(4)	Joshi, Moro Vishvanáth, B.A.	,,

Junior Scholars.

(5)*	Ajrekar, Keshav Ganesh	West Fund
*	Chándorkar, Náráyan Govind	,,
(6)*	Chitnis, Malhár Khanderáo	,,
†	Gajjar, Tribhuvandás Kalliándás	,,
(7)*	Gokhale, Mahádev Vishnu	,,
*	Gokhale, Náráyan Vishnu	,,
*	Kuká, Meherji Nasarvánji	Clare Fund.
*	Lagháte, Govind Balvantráo	,,
*	Phadke, Náráyan Lakshuman...	,,

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* Passed the First Examination for the Degree of Bachelor of Arts
† Passed the First Examination for the Degree of Bachelor of Science
(1) Nabáb of Sachin Prizeman, 1881.
(2) Bháu Dáji Prizeman, 1881.
(3) Cobden Club Medallist.
(4) Rájá of Dhár Prizeman, 1881.
(5) Mountstuart Elphinstone Prizeman, 1881.
(6) Jugonnáth Sunkersett Scholar, 1879.
(7) Ganpatráo Vithal Prizeman, 1881.

	* Unválá, Ardesir Frámji	West Fund.
(7)*	Vaidya, Lakshuman Rámchandra	,,
	‡ Apte, Raghunáth Náráyan	Clare Fund.
(8)‡	Banhati, Náráyan Daso	West Fund.
	‡ Barodiá, Dolat Purshottam	,,
	‡ Billimoriá, Ardesir Jamshedji	Clare Fund.
	‡ Boyce, Bamanji Rastamji	,,
	‡ Gobhái, Mánikji Kávasji	,,
(9)†	Kirkire, Krishnáji Hari	,,
	‡ Mantri, Káshináth Janárdan...	,,
	‡ Náik, Bhimbhái Jivanji	Gáikwád Fund.
	‡ Nánávati, Hormasji Adarji	West Fund.
(10)‡	Pádsháh, Barzorji Jamásji	Clare Fund.
(11)‡	Pádhye, Dámodar Ganesh	Gáikwád Fund.
	‡ Pandit, Ráoji Parshurám	West Fund.
	‡ Sanzgire, Jagannáth Sundarji	,,
	Bháte, Vithal Bálkrishna	Clare Fund.
(6)	Bodas, Lakshuman Chintáman	,,
	Desái, Edalji Jamásji	Elph. Fund.
	Desái, Gulábbhái Vasanji	Clare Fund.
	Gursing, Shivanmal Nanmal	Elph. Fund.
	Jayavant, Bháskar Lakshuman	,,
	Kundanmaláni, Lálchand Hasmal	Clare Fund.
(11)(12)	Khánzode, Ambádás Ravji	,,
	Koyáji, Hormasdyár Kuvarji	Elph. Fund.
(11)	Lándge, Balvant Rámchandra	,,
	Mehtá, Dinsháh Fardunji	Clare Fund.
	Mehtá, Náráyanji Kuvarji	,,
	Mehtre, Atmárám Náráyan	,,
	Upádhye, Káshináth Vishnu	Elph. Fund.
	Pádsháh, Pestanji Jamásji	Clare Fund.
(13)	Parmánand, Jagannáth Náráyan	,,
	Sule, Bálkrishna Govind	,,
	Taná, Morárji Anandji	Elph. Fund.
	Vaishampáyan, Vishnu Ganesh	Clare Fund.
	Valsárá, Mancherji Bamanji	,,
	Vyás, Rághavji Jayakrishna	Elph. Fund.

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* Passed the First Examination for the Degree of Bachelor of Arts.
‡ Passed the Previous Examination
(6) Jugonnáth Sunkersett Scholar, 1881.
(7) Ganpatráo Vithal Prizeman, 1881.
(8) Alfred Kolhápur Scholar
(9) Vináyakráo Jugonnáth Sunkersett Prizeman, 1881.
(10) Gibbs Prizeman, 1881.
(11) Berár Scholar.
(12) Sinclair Prizeman, 1881.
(13) Ráo Sir Prágmalji Scholar, 1881.

Commoners.

§ Bhide, Krishnáji Náráyan.
|| Deshmukh, Moreshvar Gopál.
(14) § Dikshit, Hari Sitárám.
§ Doctor, Bápuji Pálanji.
* Karandikar, Dámodar Krishna.
(15)* Lálváni, Vazirmal Uttamchand.
* Mangalvedhekar, Náráyan Rághavendra.
* Nádgir, Malhár Mártand.
* Nulkar, Lakshuman Krishnáji.
(16)§ Vakil, Ochhárám Nánábhái.
‡ Adhyáru, Morárji Náráyanji.
‡ Chitnis, Shankar Mahádev.
‡ Dábholkar, Gopál Rámchandra.
‡ Dámle, Mahádev Gangádhar.
‡ Dávar, Mervánji Shávaksháh,
‡ Dhurandhar, Gajánan Vishvanáth.
‡ Fezhydar, Alli Asgar bin Hassanalli.
(17)‡ Gokhale, Rámchandra Hari.
‡ Gupte, Vináyak Apáji.
‡ Jagtiáni, Bulchand Kundanmal.
(18)‡ Kále, Vishvanáth Shripat.
‡ Khot, Krishnáji Venkáji.
‡ Kolá, Hirjibhái Kuvarji.
‡ Kalburgi, Viráppá Ráchappá.
‡ Kulkarni, Mangesh Anant.
‡ Mangalvedhekar, Rajeráo Vithalráo.
‡ Mehtá, Dámubhái Dáyábhái.
‡ Modi, Kalliándás Keshavdás.
‡ Munshi, Mohanrái Davlatrái.
‡ Nimuchválá, Jehángier Dorábji.
‡ Oja, Mánshankar Parmánandás.
(15) ‡ Pahalájáni, Shivandás Lálsing.
‡ Pandiá, Harsukhrám Panditrám.
‡ Panthaki, Kaikhosru Kokobád.
‡ Patel, Bápuji Sorábji.
‡ Páthak, Rastamji Hormasji.

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‡ Passed the Previous Examination.
* Passed the First Examination for the Degree of Bachelor of Arts.
§ Passed the F. A. Examination.
|| Passed the First Examination for the Degree of Bachelor of Science.
(14) Nágpur Scholar.
(15) Sind Government Scholar.
(16) Bell Prizeman, 1881.
(17) Barodá State Scholar.
(18) Dhárvád Scholar.

‡ Sabnis, Náráyan Ghanashám.
‡ Sakládválá, Jamshedji Edalji.
‡ Setalvád, Chunilál Harilál,
‡ Seth, Sárábhái Maganbhái.
‡ Thákor, Manilál Ajitrái.
‡ Tayabji, Hydar Kamrudin.
(15) ‡ Tijáni, Muhámmad Hussein.
‡ Vaziráni, Tahilrám Khemchand.
‡ Yájnik, Mahádevlál Javerilál.
‡ Wádiá, Jamshedji Rastamji.
Abhyánkar, Sakhárám Vishnu.
Advani, Bulchand Kundamnal.
Agláve, Shankar Mahádevráo.
Bagtáni, Revá Rámrakhiámal.
(11) Bápat, Gopál Váman.
Banáji, Kharshedji Mancherji.
Bharde, Shivrám Eknáth.
Chavbal, Nilkanth Bháskar.
Chitnis, Gangádhar Mahádev.
Dastur, Mánikshah Ratanji.
Desái, Gulábrái Govindrám.
Desái, Sákarlál Chandulál.
Desái, Shankarprasád Hariprasád.
Desái, Manilál Harilál.
Dholkiá, Keshavlál Mánshankar.
Divánji, Chhaganprasád Deviprasád.
Divatiá, Krishnaráo Bholánáth.
Divechá, Navroji Ratanji.
Doctor, Frámji Pestanji.
Doctor, Kharshedji Behrámji.
Doctor, Shápurji Barjorji.
Dubásh, Jehángier Phirozsháh.
Gándhi, Dosábhái Kharshedji.
Gándhi, Virchand Rághavji.
Ghodá, Ganpatrái Mayáshankar.
Ghodá, Sadáshankar Mayáshankar.
Gite, Rámkrishna Mánkoji.
Gorádiá, Bhagvándás Mánji.
Hirámánik, Rastamji Mánikji.
Hodiválá, Shápursháh Hormasji.
Jamsetji, Kharshedji Jamsetji.
Joshi, Pitámbar Krishna.
Joshipárá, Bhupatrái Nálchand.

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‡ Passed the Previous Examination.
(15) Sind Government Scholar.
(11) Berár Scholar

Káji, Govardhandás Narrottamdás.
Kángá, Kaikhosru Kávasji.
Khárkar, Lakshuman Shivrám.
Khárkar, Vásudev Mahádev.
Koyáji, Dárasháh Kuvarji.
Koyáji, Koyáji Nasarvánji.
Lálá, Kaikhosru Barjorji.
Mánkar, Bhujangráo Rámchandra.
Master, Shávakshah Rastamji.
Mandlik, Shivrám Gangádhar.
Moulvi, Sirájudin Abdul Fáttá.
Mehta, Navnidhlál Harjivandás.
Mehtá, Vithaldás Keshavdás.
Mehtá, Jametrám Devshankar.
Mehd, Chhaganlál Anantrái.
Mináshválá, Jhenulbhái Ahmedbhái.
Munshi, Gulám Muhámmad Bávámiá.
Nálásethná, Ratanji Nánábhái.
Nene, Yashvant Vishnu.
Ojá, Gulábrái Chhaganlál.
Ojá, Shambhuprasád Vajeshankar.
Pandiá, Harilál Kirpárám.
Párikh, Limjibhái Mánikji.
Párikh, Tribhuvan Pránvalabhdás.
Patel, Ambálál Nathubhái.
Patel, Dhanjisháh Edalji.
Patel, Kharshedji Sorábji.
Patel, Pestanji Dádábhái.
Pradhán, Káshináth Bábáji.
Reporter, Phirozshán Edalji.
Sakái, Nagindás Bhaktidás.
Sámant, Námdev Vithal.
Sethná, Bhagvándás Narottamdás.
Screwválá, Kharshedji Hormasji.
Shroff, Motilál Jamnádás.
Shukla, Venishankar Reváshankar.
Thánáválá, Jehángier Rastamji.
Tárápurválá, Ratanji Jivanji.
Tátá, Edalji Pestanji.
Vaishnav, Bhupatrái Trikamji.
Vakil, Harderám Nánábhái.
Vakil, Jametrám Jivanrám.

Free Students.

‡ Arkátkar, Shankar Balvant.
‡ Bákre, Vishnu Vináyak.

‡ Passed the Previous Examination.

‡ Parvatikar, Rámchandra Krishna.
Dáji, Hormasji Kharshedji.
Desái, Khandubhái Lallubhái.
Mehtá, Motichand Javer.
Rájváde, Vishvanáth Káshínáth.
Sadáni, Udhanmal Sátrámdás.
Shroff, Kaikhosru Dosábhái.

II.—DECCAN COLLEGE.

(RECOGNIZED 1860.)

On the occupation of the Deccan by the British Government in 1818 it was found that a certain portion of the revenue of the Maráthá State had been yearly set apart for pensions and presents to Bráhmans (Dakshiná). To prevent hardship and disappointment, and to fulfil the implied obligations of the new rulers, the British Government continued these payments; but as the pensions and allowances fell in, they resolved, while maintaining the same total expenditure, under the name of the Dakshiná Fund, to devote a portion of it to a more permanently useful end, in the encouragement of such kind of learning as the Bráhmans were willing to cultivate. With this view the Poona College was founded in 1821, as a Sanskrit College, exclusively for Bráhmans.

In 1837 some branches of Hindu learning were dropped, the study of the Vernacular and of English was introduced, and the College was opened to all classes, and after having been amalgamated with the English Schools in 1851 it arose in its present form in 1857, by a separation of the College division from the School division. From another portion of the Dakshiná Fund, Dakshiná Fellowships have been founded, of which four fellowships, one Senior and three Junior, are attached to this College.

In 1863 Sir Jamsetjee Jeejeebhoy, Bart., offered to Government the sum of one hundred thousand Rupees to provide suitable College Buildings for the Deccan College.

In March 1868 the new Buildings were occupied, and the Government directed that the name, which had been Poona College, should henceforth be Deccan College.

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‡ Passed the Previous Examination.

The following endowments are connected with the Deccan College:—

I.—Government.

One Senior Fellowship, of Rs. 100 per mensem.
Three Junior Fellowships, of Rs. 75 per mensem.

Scholarships.

A.—Senior Scholarships.

For Languages, 6, tenable for one year	Rs. 20 per mensem.
For Mathematics, 2, tenable for one year	Rs. 20 per mensem.

B.—Junior Scholarships.

Eleven Junior Scholarships of the value of Rupees 10, and one of the value of Rupees 5 per mensem, tenable for one year.

Junior Scholars further pay a reduced College fee of Rupees 3 per mensem, but Senior Scholars pay the full fee of Rupees 5 per mensem.

II.—Private.

Two Candy Scholarships of the value of Rupees 4 each: one for Maráthi and one for Sanskrit. These Scholarships were founded in 1857 by some Native friends of Major Candy, some time Principal of this College, in memorial of his long services in the cause of Native literature and education.

In the year 1877 a fund was raised by subscription among Bombay Civil Servants to perpetuate the memory of William Henry Havelock, some time Revenue Commissioner, S.D. The interest upon this fund is devoted to an annual prize awarded in September of each year. The prize is open to all students of the College of not more than three years' standing.

In the year 1879 Mr. Vishnu Moreshvar Mahájani, M.A., some time a student and fellow of the College, presented the sum of one thousand rupees to found an annual Prize for that student who obtains the highest marks for Sanskrit in the annual Junior Scholarship Examination.

LIST OF PRINCIPALS.

1851. Major Thomas Candy.
1857. Edwin Arnold, M.A.
1860. William Allan Russell, M.A.
1862. William Wordsworth, B.A.
1874. R. G. OXENHAM, M.A.

1882.

Principal.

R. G Oxenham, M.A., Oxon., Professor of English Literature.

Professors.

F. G. Selby, B.A., Oxon., Professor of Logic and Moral Philosophy.

G. W. Forrest, B.A., Cambridge, Professor of Mathematics.

Rámkrishna Gopál Bhándárkar, M.A., Professor of Oriental Languages.

Khán Bahádur Dastur Hosháng Jamásp, Assistant Professor of Oriental Languages.

Fellows.

Mahádev Shivrám Gole, B.A., Senior Dakshina Fellow.
Mahádev Yashvant Dole, B.A., Junior do.
Venkatesh Dámodar Puntámbekar, B.A. do.
(1)(a) Rámchandra Hanmant Deshpánde, B.A. do.

Superintendent of Resident Students.

(2) Trimbak Ganesh Bengáli.

Librarian.

Mahádev Shivrám Gole, B.A.

Shástris.

Chintáman Shástri Thatte.
Vámanáchárya Jhalkıkar.

Students.

1.—*Graduates.*

(3) Bharuchá, Jiváji Kávasji.
(3) Bhágvat, Rámchandra Bálkrishna.

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(1) (a) Candy Sanskrit Scholar and Havelock Prizeman for 1880-81.
(2) Passed the F A. Examination.
(3) Senior Scholar.

(3) Joglekar, Vásudev Dáji.
(3) Nátu, Rámchandra Raghunáth.
(3) Sohoni, Venkatesh Abáji.

2.—*Undergraduates.*

(a.)—Senior Scholars

(4) (6) Chavhán, Bastisinh Duniásinh.
(2) Khánvelkar, Krishnáji Sadáshiv.
(2) Phansalkar, Rámchandra Ballál.

(b).—Junior Scholars.

(6) Bharuchá, Frámji Dorábji.
(6) Bhide, Vidiádhar Váman.
(6) Dastur, Meherji Hoshang.
(7) (8) Dhekne, Bápu Náráyan.
(7) Dugal, Bháskar Rámchandra.
(7) Hardikar, Chintáman Krishna.
(7) Gádgil, Parshurám Hari.
(7) Ketkar, Keshav Sadáshiv.
(6) Látkar, Shámji Antáji.
(7) Pethe, Náráyan Chintaman.
(6) (9) Sahasrabudhe, Náráyan Ganesh.
Sáthye, Shridhar Náráyan.

(c).—Commoners.

Abhyánkar, Govind Sadáshiv.
Angal, Balvant Rámchandra.
Apte, Chintáman Náráyan.
Apte, Mahádev Krishna.
Atre, Hanmant Bápuráo.
(2)(10) Bakshi, Govind Bajáji.
Bharuchá, Bamanji Hormasji.
Bharuchá, Behrámji Phirozsháh.
Bhánu, Chintáman Gangádhar.
(7) Bhat, Mahádev Vámanráo.
Bhide, Náráyan Vishnu.
(4) (7) Bhátavadekar, Purshottam Hari.
Bidi, Krishnáji Kamalo.
Billimoriá, Hormasji Rastamji.

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(2) Passed the F.A. Examination.
(3) Senior Scholar.
(4) Berár Scholar.
(6) Passed the First Examination for the Degree of B.A.
(7) Passed the Previous Examination.
(8) Mahájani Prizeman.
(9) Alfred Scholar.
(10) Dhár Scholar.

Bokil, Amrit Mahádev.
Dánge, Vishnu Náráyan.
Dátár, Hanmant Rámráo.
Deshmukh, Vishnu Keshav.
(7) Deshpánde, Dámodar Sakhárám.
(6) Deshpánde, Rámchandra Malhár.
Deshpánde, Shivrám Ganesh.
(7) Devbhánkar, Raghunáth Váman.
Devdhar, Sitárám Ganesh.
Dhadphale, Krishnáji Bahiráv.
Dhámankar, Trimbak Keshav.
Dhekne, Shridhar Lakshuman.
Dikshit, Bahirav Vishnu.
(2) Gádgil, Vishnu Gangádhar.
Gapchup, Hari Váman.
Ghárpure, Chintáman Hari.
Gogte, Balvant Rámkrishna.
Gokhale, Janárdan Ganesh.
Gokhale, Vishnu Sadáshiv.
(7) Herlekar, Vishnu Mahádev.
Jagde, Ganesh Balvant.
Javeri, Krishnadás Vishnudás.
Jog, Keshav Yashvantráo.
Joglekar, Ganesh Venkatesh.
Joglekar, Lakshuman Náráyan.
Joglekar, Rámchandra Náráyan.
Joshi, Datu Krishna.
(7) Joshi, Sakhárám Ganesh.
Joshi, Shridhar Ganesh.
(6)(11) Joshi, Vináyak Bábáji.
(12) Kále, Báburáo Náráyan.
(17) Kalsulkar, Trimbak Vithal.
(7) (9) Kamatnurkar, Ganesh Rámchandra.
(7) (9) Khándekar, Shankar Dattátraya.
Khádilkar, Balvant Purshottam.
Khánápur, Rámchandra Trimbak.
(2) Kharé, Dámodar Nilkant.
Kharé, Ganesh Náráyan.
(2) Kharé, Purshottam Parshurám.
Kharé, Vishnu Vináyak.
Kharvandikar, Náráyan Váman.
(7) Kirtane, Rámchandra Trimbak.
Konur, Shesho Janárdan.

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(2) Passed the F.A. Examination.
(6) Passed the First Examination for the Degree of B.A.
(7) Passed the Previous Examination.
(9) Alfred Scholar
(11) Hubli Scholar.
(12) Barodá Scholar.

Kotasthani, Ganesh Mádhavráo.
(7) Lele, Gangádhar Váman.
Lele, Rámchandra Sadáshiv.
(7) Limaye, Purshottam Raghunáth.
Májgávkar, Bálkrishna Rango.
(7) Máli, Keshav Govind.
Modak, Rámchandra Váman.
(7) Mule, Gangádhar Bálkrishna.
Nagarkar, Dámodar Ganesh.
(7) Nagarválá, Jamshedji Navroji.
Nisal, Shivrám Náráyan.
Onkár, Chintáman Sadáshiv.
Pálande, Prabhákar Hari.
Paránjapye, Hari Krishna.
(7) Paránjapye, Hari Rámchandra.
Paránjapye, Pándurang Lakshuman.
Paránjapye, Rámchandra Balvantráo.
(7) Parchure, Sadáshiv Gopál.
Parchure, Vináyak Náráyan.
Parvate, Shridhar Balvant.
(7) Patvardhan, Gajánan Bháskar.
(2) Patvardhan, Mahádev Náráyan.
Sahasrabudhe, Ganesh Balvant.
Sáthe, Shankar Keshav.
Sethná, Dárásháh Shápurji.
(2) Shengurpvár, Náráyan Subáji.
Sohoni, Krishnáji Vishnu.
Subandh, Báburáo Náráyan.
(7) Vakhárkar, Bháskar Lakshuman.
(7) Vaidya, Mahádev Párshurám.
Váknis, Dinkar Hari.
(7) Vargharkar, Jacob Bápuji.

(d).—Free Students.

(12) Betigiri, Svámi Narhar.
Gádgil, Sadáshiv Bápu.
(6) Kiledár, Gopál Lakshuman.
Nátu, Vishnu Raghunáth.
Rahálkar, Hari Vináyak.
(7) Shende, Ganesh Raghunáth.
Tikle, Nátu Shrikrishna.

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(2) Passed the F A Examination.
(6) Passed the First Examination for the Degree of B.A
(7) Passed the Previous Examination.
(12) Barodá Scholar.

III.—FREE GENERAL ASSEMBLY'S INSTITUTION, BOMBAY.

(RECOGNIZED 1861.)

This Institution arose out of an English School for Native youths, founded by the Rev. Dr. Wilson in 1832, and was originally dependent on local contributions. It was afterwards recognized in 1835 by the Church of Scotland and in 1843 by the Free Church of Scotland, from which body it receives the greater part of its funds. The following endowments are attached to the Institution :—

Endowed Scholarships.

One Fleming Scholarship	Rs. 100	per annum
Nesbit (R.) Memorial Theological Scholarship	„ 120	per annum.
Smyttan (G.) Memorial Scholarship...	„ 60	per annum.
Lang (W.) Scholarship.....	„ 180	per annum.
Miller (H.) do.	„ 100	per annum.
Nesbit (R.) Memorial Literary Scholarship	„ 60	per annum.
St. Clair Jameson Memorial Scholarship.	„ 40	per annum.
Four Fleming (Jas. N.) Nomination Scholarships, each	„ 40	per annum.
Purvis (Col.) Scholarship.....	„ 62	per annum.
Molesworth (J. T.) Scholarship	„ 40	per annum.
Davidson (D.) do.	„ 40	per annum.

Endowed Prizes.

The Wilson Prize (Gold Medal or Books).

The Rájá of Dhár Prize.

The Campbell (A.) Prize.
The Murray Mitchell Prize.
The Bálá Gopál Joshi Prize.
} For Preparatory Classes.

List of Principals,

1832. The Rev. John Wilson, D.D., F.R.S.
1876. THE REV. R. STOTHERT, M.A.

1882.

Principal.

The Rev. R. Stothert, M.A, Professor of Logic and Moral Philosophy.

Professors.

The Rev. D. Mackichan, M.A., B.D., *Acting* Principal, Professor of Physics and Mathematics.
The Rev. Buchanan Blake, M.A., B.D., Professor of History and Political Economy.
The Rev. A. C. Grieve, Professor of English Literature.
,, ,, R. Scott, M.A., Professor of Mathematics and Latin.
Shridhar Ganesh Jinsivále, M.A., Professor of Sanskrit.
Kharshedji Mancherji Khateli, Professor of Persian.

Shastri.

Ráoji Rámchandra Upásani.

Teaching Fellows.

Jamshedji Edalji Dáruválá, B.A., B.Sc.
Jamshedji Mervánji Antiá, B.A.

Students.

(1) Sapre, Dattátraya Sadáshiv.
(1) Masáni, Adarji Mernosji.
Thakar, Uttamrám Dhirajrám.
Koppikar, Shesgiri Rámchandra.
Bálsekar, Manjáppá Nilkanth.
Bakshi, Venkat Rághavendra.
Trivedi, Durgeshvar Natvarji.
Iráni, Kaikhosru Tirandos.
Patel, Dorábji Mánikji.
Joshi, Purshottam Nilkanth.
(1) Saklátválá, Mervánji Nánábhái.
(1) Párnáik, Náráyan Ábáji.
Patvardhan, Raghunáth Krishnáji.
(1) (2) Arte, Bháskar Rámchandra.
(1) Rájvade, Vaijanáth Káshináth.
Bhátavadekar, Ganpat Keshav.
Dalál, Chunilál Jivandás.
Sapre, Vishnu Vináyak.
Chándekar, Vásudev Vithal.
Paul, Ganeshráo.
Záte, Mahádev Rangnáth.
Shroff, Dádábhái Pestanji.
Dábholkar, Ganesh Krishna.
Patel, Jamshedji Pestanji.
Nálásethná, Ratanji Nánábhái.
Khulábeválá, Rastamji Behrámji.
Adarianválá, Kharshedji Dorábji.

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(1) College Scholar.
(2) Jugonnáth Sunkersett Sanskrit Scholar, 1880

Mehtá, Kávasháh Behrámji.
Tullu, Govind Mahádev.
Dádáchanji, Hormasji Temulji.
Sháh, Rámdás Keshavji.
(3) Chaván, Udhavji Devji.
Kále, Krishnaráo Náráyan.
Ráirkar, Nilkanth Bálkrishna.
Vakil, Ardesir Kávasji.
(3) Mehtá, Gangárám Jethá.
Thorat, Chintáman Vináyak.
Tupe, Govind Balvant.
Dabáo, Dorábji Mervánji.
Dhume, Dinánáth Pándurang.
(1) David, Ganpatráo Rámji.
(4) Ezra, Reuben.
Pitale, Váman Dámodar.
Modak, Sháhu Rámkrishnapant.
(1) Oka, Gopináth Vináyak.
Patvardhan, Vásudev Vithal.
Kaikini, Shankar Krishnáji.
Mehtá, Bápuji Rastamji.
(1)(2) Joshi, Narhar Bálkrishna.
Ezekiel, Ezekiel Moses.
(1) Karve, Dhondu Keshav.
Punegar, Nárarvánji Edalji.
Pingle, Káshináth Moreshvar.
(1) Koregávkar, Káshináth Rámkrishna.
(1) Carret, Arthur Anáji.
Joshi, Vishnu Trimbak.
Puránik, Shridhar Govind.
Kále, Moreshvar Rámchandra.
Dalál, Trimbaklál Tribhuvandás.
(1) Bhágvat, Sakhárám Keshav.
Deshpánde, Krishnáji Rámchandra.
Herbert, Thomas Lenahan.

IV.—BOMBAY ST. XAVIER'S COLLEGE.

(RECOGNIZED 1869.)

St. Xavier's College owes its origin to the development and growth of St. Mary's Institution and of the European Roman Catholic Orphanage. In it Undergraduates may

(1) College Scholar.
(2) Jugonnáth Sunkersett Sanskrit Scholar, 1881.
(3) Ráo Sir Prágmalji Scholar.
David Sassoon Hebrew Scholar.

continue their University studies under the same advantages as those enjoyed at St. Mary's High School.

The site of the College was granted by Government in 1867. The funds were supplied chiefly from private sources, Government contributing a grant of Rs. 61,368.

There are two endowed Scholarships connected with the College :—

(*a*). The Mission Scholarship, of Rs. 25 per mensem, in favour of that boarder of St. Mary's Institution who passes Matriculation with the highest number of marks and continues his studies at St. Xavier's College, if he be not otherwise provided for.

(*b*). The Cowasjee Jehanghier Scholarship for Portuguese Undergraduates, of the annual value of Rs. 125, tenable for two years. It is awarded by competition in an English Essay. The competition takes place in the month of January.

1882.

Rector.

The Rev. F. Dalhoff, S.J., Professor of Mathematics.

Professors.

The Rev. H. Kemp, S.J., Ph.D., Bonn, Professor of Physical Science.
" " H. Bochum, S.J., Professor of Philosophy and History.
" " F. Dreckmann, S.J., Professor of Physics and Mathematics.
" " J. M. Hamilton, S.J., Professor of English Literature.
" " J. LeHalle, S.J., Professor of Latin.
" " O Lugert, S.J., Professor of Latin.
" " F. Mayr, S.J., Professor of Political Economy.
Mr. Rájarám Rámkrishna Bhágvat, Professor of Sanskrit.
Mr. Mahomed Tuky Haji Medi, Professor of Persian.

Students.

(*a*).—*Graduates.*

Kharshedji Dhanjibhái Shroff, B.A.
Náráyan Moroji Vijayakar, B.A.

(*b*).—*Undergraduates.*

Seniors.

(1) Bálkrishna Náráyan Chitale.
(1) Vishvanáth Náráyan Sáthye.
(1) Anandráo Raghunáth Dhume.

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(1) Passed the F.A. Examination.

(2) Anandráo Rámchandra Jayakar,
(1) Ishvarchandra Rámchandra Jayakar.
(1) Pándurang Ganpat Patvardhan.
(3) Sorábji Frámji Billimoriá.
(2) Bháu Mangesh Wágle.
(2) Maheshvar Náráyan Devdhar.
(2) Bejanji Navroji Kutár.
(3)(5)G. A. O'Grady.
Vishnu Gangádhar Ghánekar.
Rámchandra Hari Velankar.
Pestanji Kávasji Kángá.
(3) Dorábji Jamshedji Táttá.
(3) Jamshedji Merjibhái Vajifdár.
(3) Jamshedji Kávasji Patel.
(3) Anandráo Sadáshiv Dalvi.
(3) Vináyak Mádhavráo Moré.
(3) Jehángier K. R. Cámá.
(2) Shántárám Ganesh Rele.
(2) Ganpatráo Raghunáth Wágle.
(2) Pestanji Mánikji Kángá.
(2) Kaikhosru Ardesir Munshi.
Rastamji Kávasji Columbáválá.
(2) Ranchhoddás Lálbhái Damniá.
Náráyan Sadáshiv Devrukhkar.
Bájiráo Krishnaráo Dhairyaván.
(4) Karamáli Dost Muhámmad.
Sorábji Edalji Mádan.
Chandulál Ghelábhai Mal.
(2)(5)Dárásháh Bejanji Mehtá.
Ardesir Nasarvánji Pleader.
(2) Phirozsháh Nasarvánji Pleader.
(2) Atmárám Vishnu Pandit.
(2) Frámji Ardesir Ráná.
Nasarvánji Fakirji Surveyor.
Rámchandráo Atmarám Tarkhad.
(2) Behrámji Hirjibhái Warden.
(2) Rámchandra Ghanashám Sabnis.
Hirjibhái Dinsháh Engineer.
(2) Shripat Khanderáo Vijayakar.
(2) Manchersháh Bamanji Master.

Juniors.

Bálkrishna Vináyakráo Agáskar.

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(1) Passed the F.A Examination.
(2) Passed the Previous Examination.
(3) Passed the First Examination for the Degree of B.A.
(4) Ráo Sir Prágmalji Scholar.
(5) Berár Scholar.

Hormasji Dorábji Adarianválá.
Phirozsháh Dhanjibhái Allbless.
R. C. Columbáválá.
Pestanji Dárukhánáválá.
Jehángier Edalji Doctor.
Frámji Pestanji Doctor.
(6) Ignatius DeMello.
Dinánáth Sundarnáth Khote.
Aloysius Dowling.
Stanislaus Dowling.
Frederick DeGama.
Gangádhar Náráyan Gháte.
Chhaganlál Nathubhái Gunderiá.
(7) Louis Kershaw.
Frámji Jamshedji Kukáná.
Hormasji Bápuji Laskari.
Dvárkádás Dharamshi Merchant.
Mancherji Fardunji Mehtá.
Chhaganrám Astigrám Mehtá.
Vásudev Keshav Mávlankar.
(7) John Henry Moise.
Tribhuvandás M. Modi.
Harichand Sadáshiv Náik.
Mádhavráo Morobá Pingle.
Vithal Bápuji Ráne.
Mancherháh Nánábhái Rániná.
Phirozshah M. Sakládválá.
Louis Valladares.
Dinkar Khanderáo Vijayakar.
Hirjibhái Rastamji Wádiá.

V.—GUJARAT COLLEGE.

(Recognized 1879.)

In 1856 a subscription was set on foot for the establishment of a College at Ahmedabad. A sum of Rupees 50,000 was collected, and by favourable investment and accumulation of interest this amount was afterwards raised to Rupees 70,000. In 1858 the sanction of Government was given to the "establishment of a professional School at Ahmedabad (to be called a College if thought desirable) in which English composition, translation, the elements of jurisprudence (as required by Deputy Magistrates and Police Officers), positive law in its most popular and useful branches,

(6) Cowasjee Jehanghier Latin Scholar, 1881.
(7) Cowasjee Jehanghier Portuguese Scholar

the elements of political economy, the revenue and administrative system of Government in India, drawing as a useful rather than a fine art, surveying and the most practically useful applications of natural science (especially agricultural chemistry) might be taught." The object of the College was the special preparation of youths "for Government employment in the Revenue and Judicial lines and in the Public Works Department." Government promised a State contribution equal to the annual interest of the Endowment, and with the total sum thus available classes were sanctioned for the instruction of youths in Law and Civil Engineering. But the insufficiency of the income for even a school of this character, and the want of precise and definite objects at which the institution might aim, were from the first apparent, and combined with other causes to prevent the development and growth of the College. The Engineering class was never opened, partly because of the difficulty of obtaining a competent teacher for the salary offered, partly because of the discouraging want of funds and opportunities for practical instruction. In the Law class, on the other hand, it was found that the general education of the pupils was not as high as was required for the effective study of jurisprudence ; and it was considered that instruction in Literature was necessary to liberalize their minds. Accordingly in 1863 the salary set apart for the Engineering lecturer was divided between three teachers in the subjects of (1) Logic, Moral Philosophy and History, (2) Applied Mathematics (Surveying, Mechanics, &c.), (3) Drawing. The two last subjects were intended for boys desirous of preparing for admission to the new Civil Engineering College at Poona. These arrangements continued in force until 1872, when the failure of the Law students to pass the test imposed on candidates for the Pleaders' examination led to an enquiry which resulted in the closing of the Law class. The other classes were continued for a time until it could be decided how the funds might be applied to a less vague object than that assigned to the College "of keeping up a taste for literary pursuits in young men who had matriculated, and of extending the knowledge of those who were unmatriculated." The leading Native gentlemen of Ahmedabad acquiesced in this condemnation of the old institution, but applied to Government for the establishment at Ahmedabad of an Arts College

such as that given to Poona, and at once set themselves to the task of collecting additional subscriptions, which, with the old fund, might form a sufficient endowment to justify compliance with their application. In September, a public meeting was held, and a Committee of management was appointed with the Collector as President. By these efforts Ahmedabad has raised a fund which will yield a yearly income of Rupees 8,000. This sum, met by a Government grant of equal amount and supplemented by fees, has been considered sufficient for the establishment of a class studying up to the Previous standard. The Trustees for the College are the Collector of Ahmedabad, Ráo Bahádur Bechardás Ambaidás, and Ráo Bahádur Hemábhái Premábhái, the Collector being nominated by Government, while the two Native gentlemen were elected by the subscribers.

The endowments connected with the Gujarát College are—

The Ráo Bahádur Maganbhái Karamchand Scholarships, five in number, of the annual value of Rs. 348 per annum.

The A. A. Borradaile Scholarship, of the value of Rs. 120 per annum, from the Borradaile Fund entrusted to the Gujarát Vernacular Society.

1882.

Principal.

K. T Best, M.A., Oxon. Professor of English Literature. (*On leave.*)

Mahádev Moreshvar Kunte, B.A., *Acting* Principal and Professor of English Literature.

Professors.

Jamshedji Ardesir Dalál, M.A., LL.B., Professor of Mathematics and Natural Philosophy. (*Acting* Vice-Principal, Elphinstone High School, Bombay.)

Kávasji Jamshedji Sanjáná, M.A., *Acting* Professor of Mathematics and Natural Philosophy.

Abáji Vishnu Kathavate, B.A., Professor of Oriental Languages.

Dakshina Fellow.

Mániklál Sákarlál Desái, M.A.

Commoners.

(1) Sháh, Mahásukh Narsingdás.
Mehtá, Gopálrái Dolatrái.

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(1) Ráo Bahádur Maganbhái Karamchand Scholar.

(1) Patel, Chunilál Kákubhái.
Sethná, Rastamji Aspaniárji.
(1) Vyás, Jatáshankar Dayárám.
Párikh, Trikamlál Narottamdás.
(1) Patel, Chaturbhái Valabhbhái.
(2) Desái, Hirálál Motilál.
(1) Karnik, Krishnráo Balvantráo.

VI.—RA'JA'RA'M COLLEGE

(Recognized 1880.)

The Rájárám College, which is maintained by the Kolhápur State, owes its origin partly to the growth and development of the Rájárám High School, and partly to the desire of Government to make a suitable provision for the education of Chiefs and Sardárs in the Southern Maráthá Country. The British Government having assumed the administration of the State in 1844, laid the foundation of English education in 1851 by opening an English school in the town of Kolhápur. This in 1867 was raised to the status of a High School, called the Rájárám High School, after the lamented Rájárám Mahárаj of Kolhápur, who while travelling in Europe died at Florence in 1870.

In 1880 the Government, on the recommendation of the Political Agent, raised the School to an Arts College which was subsequently recognised in the Faculty in Arts of the University of Bombay for the purposes of the Previous Examination.

The College is provided with a substantial and ornamental building which cost the Kolhápur State nearly five lakhs of Rupees, the foundation stone being laid in 1869 by the late Rájá and the building completed in 1874.

Endowments.

Government has sanctioned the transfer of the sum of Rs. 760, being the annual interest on the so-called Sardárs' Fund at Belgaum, where a Sardárs' Class was opened some years ago.

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(1) Ráo Bahádur Maganbhái Karamchand Scholar.
(2) A. A. Borradaile Scholar.

The late Rájárám Mahárájı, to commemorate the visit of His Royal Highness the Duke of Edinburgh to this country, invested Rs 45,000 in the four per cent. Promissory notes, the interest thereon being applied to the formation of Scholarships for the encouragement of higher education in the State. The following Scholarships are awarded every year —

(*a*) One Alfred Scholarship of Rs. 20 per mensem tenable for four years at the Grant Medical College, Bombay, will be awarded to a deserving freshman who shall have matriculated from the Rájárám High School after having attended that school for not less than three continuous years immediately previous. The stipend may be continued for a fifth year if funds are available and the Principal recommends it. If there be no freshman desirous of studying medicine, a scholarship of the same value to be held in Bombay and tenable for two years will be given to a deserving candidate who passes the Previous Examination from the Rájárám College with the highest number of marks.

(*b*). Two Alfred Scholarships of Rs 15 per mensem, each tenable for two years and to be held at any College, will be awarded to two deserving students who have passed the Previous Examination from the Rájárám College after having attended it for two full terms.

(*c*). Four Alfred Scholarships of Rs. 10 per mensem to be held for one year at the Rajárám College will be awarded to four deserving students who have passed the Matriculation Examination from the Rájárám High School after having attended it for not less than two continuous years immediately previous.

1882.

Principal.

C. H Candy, B A., LL M , Cantab,, Principal and Professor of English Literature.

Professors

Balvant Bhikáji Vakhárkar, B A , Vice-Principal and Professor of Mathematics and Natural Philosophy.

Shivrám Bápuji Paránjapye, B.A., Professor of Oriental Languages.

Báláji Prabhákar Modak, F.A., Lecturer in Physical Science and *ex-officio* Superintendent of the Rájkumárs.

Alfred Scholars.

Kulkarni, Eknáth Subráo.
Patvardhan, Ganesh Vináyak.
Rásinkar, Vishnu Krishna.
Válávalikar, Pándurang Báburáo.

Students paying half-fee.

Bijápurkar, Vishnu Govind.
Chirmule, Vásudev Ganesh.
Gokhale, Gopál Krishna.

Commoners.

Ankle, Kuber Bharmappa.
Chipade, Shrinivás Lakshuman.
Gáikavád, Khanderáo Appásáheb.
Jávdekar, Dattátraya Jagannáth.
Jog, Vásudev Náráyan.
Kále, Parshurám Balvant.
Kaujalgikar, Govind Yashvant.
Kulkarni, Janárdan Eknáth.
Málápur, Rámchandra Svámiráo.
Maráthe, Krishnáji Dhondo.
Moghe, Vishnu Balvant.
Mudvedkar, Shrinivás Rájeráo.
Nadgavdá, Nilkanth Annáráo.
Pádhye, Dattátraya Keshav.
Phadnis, Hanmant Sheshagir.
Sahasrabudhe, Bápu Ganesh.
Sovani, Govind Krishna.
Tádpatri, Mahádev Bálkrishna.

VII.—BARODA COLLEGE.

(Recognized 1881.)

The Baroda College was founded to complete the system of English education organized in the Baroda State by the Government of His Highness the Mahárájah Sayájiráo Gáekwár, and on the 1st of October 1881 was recognized in the Faculty of Arts of the University of Bombay for the purposes of the Previous Examination. The College building

is one of the handsomest structures of the kind in India. It is in the shape of an E, the centre being formed by a domed hall sixty feet square and one hundred and forty-four feet high. Each wing contains ten class rooms, five on the ground floor and five on the first floor, besides library, museum, chemical and physical laboratories, offices, and smaller ante-rooms. There is accommodation for about six hundred students, and College and High School classes are both carried on in the building. The style of architecture is early Hindu *(Hemádapanti)*, and the design is by R. Chisholm, Esq., F. R. I. B. A., Architect to the Madras Government. The building has cost about Rs. 6 lakhs.

Endowments.

Three scholarships of Rs. 20 per mensem tenable at any college are awarded under certain conditions to students passing the Previous Examination direct from the Baroda College. Two additional scholarships of Rs. 20 per mensem are reserved for students wishing to join the Poona College of Science or the Grant Medical College. Five scholarships of Rs. 5 per mensem to be held for one year at the Baroda College are awarded under certain conditions to deserving students who have passed the Matriculation Examination from the Baroda High School.

1882.

Principal.

T. S. Tait, M.A., Camb., B.Sc., Lond., Professor of Mathematics and Natural Philosophy.

Professors.

Harold Littledale, B.A., Senior Moderator T. C.D., Vice-Principal, Professor of History and English Literature.
Tápidás Dayárám Mehtá, M.A., Assistant Professor of Mathematics.
Govind Moreshvar Hasabnis, B.A., } Lecturers in Sanskrit.
Shridhar Keshav Dámle, B.A., }
Farid-ud-din Ahmed, B.A., Lecturer in Persian.

Scholars.

Astekar, Rámchandra Ganesh.
Dev, Vishnu Sitárám.
Kále, Sadáshiv Váman.
Pátil, Govind Appáji.
Támbe, Ganesh Krishna.

Commoners.

Alekar, Gopál Bápuji (half-fee).
Ambegávkar, Shankar Keshav.
Barve, Raghunáth Sadáshiv.
Buch, Trimbakrái Trikamlál.
Chháyá, Jatáshankar Jivanlál.
Desái, Naginbhái Santokrái.
Dholkiá, Manishankar Sadáshankar.
Divátiá, Vináyak Ishvarbhái.
Ghuse, Gopál Rámchandra.
Goghári, Trikamlál Bechardás.
Hájarat, Himatrái Námatrái.
Joshi, Jayashankar Parmánand.
Kárlekar, Ganesh Dhondu.
Majmudár, Sárábhái Válábhái.
Mediválá, Mánikji Kuvarji.
Mehtá, Umedrám Jametrám.
Mehtá, Vajerám Manibhái,
Pándiá, Bhagvantrám Narbherám.
Patel, Ambálál Nathubhái.
Sadávarte, Mártand Balvant.
Sháh, Mohanlál Mokamchand.
Sutáriyá, Chhotálál Chunilál.
Trivedi, Tanmanshankar Ratanshankar.
Vaishnav, Anandrái Dvárkádás.
Vaishnav, Jayaprasád Hariprasád.

VIII.—GOVERNMENT LAW SCHOOL.

(RECOGNIZED 1860.)

The foundation of this institution is due to a subscription which was raised by the inhabitants of Bombay in the month of November 1852, on the eve of the departure from India of Sir Thomas Erskine Perry, Knight, Chief Justice, who had been for nearly nine years President of the Board of Education, to found a Professorship of Jurisprudence, as a memorial of his long connection with both law and education in India.

This endowment yields a monthly income of Rs. 169, to which Government contribute a subsidy, which was fixed in 1856 at Rs. 100 per mensem, the aggregate being the stipend of the Perry Professor of Jurisprudence. Government also contributes Rs. 600 per mensem for the maintenance of two Professorships of Law.

Lectures are delivered on the following subjects :—

1. Roman Civil Law. Elements of General Jurisprudence and International Law.
2. Succession and Family Rights, with special reference to Hindu and Mahomedan Law.
3. The Law of Contracts, and of the Transfer and Lease of Immoveable Property.
4. Equity with special reference to the Law of Trust, Mortgages and other securities for money, and Specific Relief.
5. The Law of Torts and Crimes.
6. The Law of Evidence, Civil Procedure, including Limitation and Criminal Procedure.

1882.

Professors.

Edward Tyrrell Leith, LL.M., Barrister-at-Law, Government Professor of Law.

William C. Webb, Barrister-at-Law, Government Professor of Law. (*Acting* Presidency Magistrate.)

Kashinath Trimbak Telang, M.A., LL.B., Barrister-at-Law. *Acting* Government Professor of Law.

James Jardine, M.A., Barrister-at-Law, Perry Professor of Jurisprudence.

I.—Senior Law Students.

Antiá, Jamshedji Mervánji, B.A.
Bhándárkar, Shridhar Rámkrishna, M.A.
Bhárváni, Harchandrái Vishindás, B.A.
Cámá, Jehángier K. R.
Cámá, Rustam K. R., B.A.
Chitnis, Malhar Khanderáo.
Dáruválá, Kharshedji Frámji, B.A.
Dávar, Mervánji Shávaksháh.
Doctor, Nánábhái Behrámji, B.A.
Engineer, Kaikhosru Nasarvánji, B.A.
Gajjar, Tribhuvandás Kalliándás.
Judge, Jametrám Nánábhái, B.A.
Kápadiá, Dámodar Manji, B.A.
Karandikar, Dámodar Krishna.
Kelkar, Hari Váman, B.A.

Lagháte, Govind Balvantráo.
Lálkáká, Ardesir Jamshedji, B.A.
Munshi, Nasarvánji Pestanji, B.A.
Nagarkar, Rámchandra Dáji, B.A.
Sanzgire, Jagannáth Sundarji.
Sáne, Bálkrishna Rámchandra, B.A.
Sattáválá, Motilál Tribhuvandás, B.A.
Sáthe, Vishvanáth Náráyan.
Shirgávkar, Rámchandra Rághobá, B.A.
Shukla, Devdat Dhaneshvar, B.A.
Vakil, Mancháshankar Jivanrám, B.A.
Vakil, Rastam Bamansháh, B.A.
Vániá, Hoshangji Barzorji, B.A.
Wells, Devji Brijlál, B.A.

II.—Junior Law Students.

(1)* Bhadbhade, Lakshuman Gangádhar, B.A.
* Adhyáru, Morárji Náráyanji.
* Apte, Govind Shridhar.
* Arkátkar, Shankar Balvant.
* Bhágvat, Balvant Abáji, B.A.
* Barodiá, Dolat Purshotum.
* Chitalé, Bálkrishna Náráyan.
* Dáruválá, Jamshedji Edalji, B.A.
* Doctor, Dinsháh Jijibhái.
* Doctor, R. D.
* Dost Muhámmad Karamálli.
* Divátiá, Narsingráo Bholánáth, B.A.
* Dholkiá, Keshavlál Mánshankar.
* Gándhi, Virchand Rághavji.
* Gobhái, Mánikji Kávasji.
* Godbole, Rámchandra Parshurám, B.A.
* Gokhale, Mahádev Vishnu.
* Jagtiáni, Bulchand Kundanmal.
* Joshi, Moro Vishvanáth, B.A.
* Karandikar, Venkatesh Balvant, B.A.
* Khoté, Dvárkánáth Rámnáth.
* Mirzá, Nasarvánji Frámji.
* Mistri, Jijibhái Pestanji, B.A.
* Modi, Kaikhosru Frámji.
* Munshi, Gulám Muhámmad Bávámiá.
* Mánkar, Náráyan Lakshuman, B.A.
* Mehtá, Dámubhái Dáyábhái.
* Munshi, Mohanrái Davlatrái.
* Náik, Bhimbhái Jivanji.
* Pai, Nágesh Vishvanáth, B.A.

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* Passed the Jurisprudence Examination of 1881.
(1) Priseman for proficiency in Jurisprudence Examination of 1881.

* Pandiá, Harsukhrám Panditrám.
* Pahalájání, Shivandas Lálsing.
* Phadke, Rámchandra Dinkar, B.A.
* Spencer, Shápurji Barzorji
* Saraiyá, Gokuldás Vithaldás, B.A.
* Seth, Sárábhái Maganbhái.
* Setalvád, Chunilál Harilál.
* Vakil, Shápurji Jehángier.
* Vajeráni, Tahilrám Khemchand.
* Wádiá, Hirjibhái Pestanji.

III.—Candidate Law Students.

Wâgle, Krishnáji Balvant, B.A.
Bharde, Shivrám Eknáth.
Divátiá, Krishnaráo Bholánáth.
Mehd, Chhaganlál Anantrái.
Phátak, Vishnu Bháskar.
Patel, Dorabji Mánikji.
Dubásh, Sorábji Edalji.
Jayakar, Sundarráo Gajánan, B A.
Mangalvedhekar, Rájeráo Vithal
Mangalvedhekar, Náráyan Rághavendra.
Parvatikar, Rámchandra Krishna.
Kále, Vishnu Shripat
Apte, Raghunáth Nárayan.
Bagtiáni, Revá Rámrakhiámal.
Sadáni, Udhanmal Sátrámdás.
Mandlik, Shivrám Gangádhar.
Gursing, Shivanmal Nandmal.
Billimoriá, Kávasji Pestanji.
Kángá, Pestanji Mánikji.
Kutár, Bejanji Navroji
Nulkar, Lakshuman Krishna.
Dhume, Anandráo Raghunáth.
More, Vináyak Mahádev.
Modi, Kalliándás Keshavdás,
Bámboatválá, Dádábhái Adarji.
Kundanmaláni, Lálchand Hasmal.
Shroff, Khershedji Dhanjibhái.
Patel, Jamshedji Kávasji
Parmánand, Jagannáth Náráyan.
Vakil, Ochhavrám Nánábhái.
Kalburgi, Virappá Ráchappá.
Bodas, Lakshuman Chintáman.
Upádhye, Káshináth Vishnu
Khánzode, Ambádás Ravji
Abhyánkar, Sakhárám Vishnu.

* Passed the Jurisprudence Examination held in 1881

Bháte, Vithal Bálkrishna.
Lándge, Balvant Rámchandra.
Bápat, Gopál Váman.
Mehtá, Jametrám Devshankar.
Thákor, Manilál Ajitrái.
Kángá, Mancherji Kávasji.
Mehtá, Motichand Javer.
Sunáválá, Rastamjj Bejanji.
Pandiá, Harilál Kirpárám.
Yájnik, Mahádevlál Javerilál.
Khare, Dámodar Chintáman.
Vakil, Hardevrám Nánábhái.
Manerikar, Bháskar Dhonddev.
Desái, Khandubhái Lallubhái.
Desái, Sákarlál Chandulál.
Nádgir, Malhár Mártand.
Joglekar, Vásudev Dáji.
Joshi, Pitámbar Krishna.
Bharuchá, Jiváji Kávasji.
Athavankar, Anandráo Mangesh.
Lele, Mahádev Venkatesh.
Bhide, Krishnáji Náráyan.
Mehtá, Náráyan Kuvarji.
Káji, Gordhandás Narottamdás.
Agláve, Shankar Mahádevráo.
Bahádurji, Kaikhosru Nasarvánji.
Rele, Shántárám Ganesh.
Pradhán, Káshináth Bábáji.
Ghátı, Gangádhar Náráyan.
Kelkar, Dámodar Ganesh.
Vánavale, Sadáshiv Rangnáth.
Sohoni, Venkatráo Abáji.

IX.—GRANT MEDICAL COLLEGE.

(Recognized 1860.)

This College was established in the year 1845, under the name of the Grant Medical College, as a tribute to the memory of the late Sir Robert Grant, Governor of Bombay, with whom the system of instruction pursued in it originated. The object of its establishment is to "impart, through a scientific system, the benefit of medical instruction to the Natives of Western India." A moiety of the cost of the building was defrayed by Sir Robert Grant's friends, the remainder by Government. The funds for the

support of the College, with the exception of certain endowments for the encouragement of deserving students, are contributed by Government.

The College is under the immediate control of a Principal who is subordinate to the Director of Public Instruction. Lectures are delivered in the English language on every branch of Medical Science by Professors, who are generally officers on the Bombay Medical Establishment.

Clinical and practical instruction is imparted in the Jamsetjee Jeejeebhoy Hospital, which contains 350 beds, and has attached (*a*) an Obstetric Institution with 30 beds; (*b*) an Ophthalmic Hospital (Cowasjee Jehánghier Ophthalmic Hospital) with 60 beds; (*c*) a Hospital for incurables, built by the Sir Jamsetjee Jeejeebhoy family, containing 40 beds. There are also two detached buildings, each with 20 beds, for the treatment of persons suffering from Contagious Diseases.

The students are arranged in two classes :—

1. Graduates and Undergraduates of the University of Bombay, who are educated through the English language for Medical Degrees.

2. Members of the European Branch of the Government Medical Subordinate Department, who are educated through the English language for the grade of Apothecary.

The College possesses the following endowments :—

The Farish, Carnac, Anderson, Reid, McLennan, Jamkhandi and Cowasjee Jehanghier Readymoney Scholarships and Medal Funds, the Sir Jamsetjee Jeejeebhoy Medical Book Fund, Prize Fund, and Gold Medal Fund; the Burnes, Arnott and Hemabhoy Vakutchund Medal Funds; and Sir J. P. Willoughby, Sir Cowasjee Jehanghier Prize Funds, and Hunter Prize Funds.

The aggregate sum on account of these endowments amounting to Rs. 1,08,700, is lodged in the Government Treasury.

Formerly the College conferred upon its students a Diploma or License to practise medicine, and the designation "Graduate of Grant Medical College." There are at the present time forty-eight such Graduates, who either are en-

gaged in the private practice of their profession or are in the service of Government. Upon the establishment of the University of Bombay, the College ceased to grant diplomas, and became affiliated to the University as a College for medical education.

LIST OF PRINCIPALS.

1845. Charles Morehead, M.D., F.R.C.P.
1860. John Peet, M.D., F.R.C.P.
1865. Herbert John Giraud, M.D.
1865. Robert Haines, M.B.
1866. William Guyer Hunter, M.D., F.R.C.P.
1876. HENRY COOK, M.D., M.R.C.P., F.R.G.S., F.G.S., F.M.S.

1882.

Principal.

H. Cook, M.D., M.R.C.P., F.R.G.S., F.G.S., F.M.S., Professor of Medicine, and Clinical Medicine and Hygiene. *(Europe.)*
H. V. Carter, M.D., *Acting* ditto.

Professors.

A. N. Hojel, L.K. and Q.C.P.I., Professor of Physiology.

H. J. Blanc, B.A., B.Sc., M.D., M.R.C.P., Professor of Surgery, Clinical and Operative Surgery.

I. B. Lyon, F.C.S., M.R.C.S., Professor of Chemistry and Medical Jurisprudence.

W. Gray, M.B., Professor of Botany.

J. Arnott, M.D., Professor of Midwifery and Diseases of Women and Children.

W. F. Knapp, M.R.C.S., Professor of Anatomy. *(Europe.)*

W. K. Hatch, M.B., *Acting* Professor of Anatomy.

G. A. Maconachie, M.D., Professor of Ophthalmic Medicine and Surgery and of Zoology and Comparative Anatomy.

D. Macdonald, M.D., B.Sc., Professor of Practical Histology and Physiology.

G. Waters, Professor of Pathology and Curator of the Anatomical Museum.

R. Manser, Professor of Materia Medica.

Demonstrator.

Anná Moreshvar Kunté, B.A., M.D., Demonstrator of Anatomy.

Senior Students.

		Foundation.
*†	Náráyan Vináyak Chhatre	
*†	Chhaganlál Gulábdás Káji	
*†	Jamshedji Pochájı Pochá	
*†	Maganlál Umıáshankar Bhat	
*†	Keshav G pál Kámle	
*†	Ardesır Hormasjı Sethná	
*†	D A. DeMonte	
*†	Surajlál Mathurádás Davlatjádá ...	
*†	Rastamji Nasarvánji Laskari	
*†	Sakhárám Rághobá Bábre	
*†	Sorábji Nasarvánji Abádán	
*†	Daniel Conceição Luis	
*	E. H. Brown	. Carnac.
*	Thomas H Acquino	.. Farish.
*	John Poyntz	. Reid and Government Exhibition.
*	J. F. Mirzá	. Government Exhibition.
*†	Govind Mulji Dixon	.. Farish.
*	Nánábhái Navroji Kátrak ...	. .Anderson
*	J. O. Pinto	...
*	Tuljárám Chunilál Khándválá ...	...
*	Rastamji Pálanji Kutár	...
*	Pestanji Bhikáji Narimán ...	...
*	Mervánji Kuvarji Bharuchá ...	...
*	John Bocarro	...
*†	Jehángier Mánikji Penti	...
*†	Nádarsháh, Hormasji Sukhiá ...	...
*†	P. S. Achutráo	...Mysore Scholarship.
*	Jamshedji Bhikáji Unválá ...	...
*	Anubhái Mahipatrám Nilkanth ...	...
*	Atmárám Vásudev Velkar ...	...
*†	Kharshedji Santukji Santuk ...	...
*	Kharshedji Navroji Sahiár ...	...
*	Bhavánishankar Bálkrishna Dádarkar	...
*	Nasarvánji Hormasji Choksi ...	...Farish and Lisboa.
*	Francis DeAttaides...	. Carnac.

* Passed the First Examination for the Degree of L.M. & S.
† Free students.

		Foundation.
*	Mahádev Hari Bhátavadekar ...	Farish.
*	Sorábji Kharshedji Narimán .	.. Reid.
*	Kávasji Jehángier Kharás ...	Anderson
*†	Nasarvánji Frámji Bausháh ...	..
*	Jijibhái Pestanji Nicolson ...	...
*	Dhanjibhai Hirjibhái Patel .	...
*	Kávasji Kharshedji Lálkáká	
*	Gangádhar Gopál Bopardikár ..	. Alfred Scholarship.
*	Kávasji Mothábhái Báthivála ..	...
*†	Mirjibhái Rastamji Sett	
*	Herbert Leslie Gordon	.
*	Anantrái Náthji Mehtá	..
*†‡	Náráyan Raghunáth Sátpute ..	.
*	Shridhar Sakhárám Barve	
*†	Krishna Sakhárám Pednekar .	..
*	Dosabhái Hormasji Kátrak ..	..
*	Jehángier Barjorji Doctor ..	..
*	Kaikhosru Nánábhái Spencer	.
*	Robert John Draper Hall	. Government Exhibition.
*	Mahipatrám Govindrám Mehtá ..	.
*	F. Henriques	..

Junior Students.

†	Kávasji Pestanji Bharuchá ...	..
	Dorábji Hormasji Bharuchá .	...
	Rastamji Hormasji Bháyá ...	..
	John Charlton Brooks	..
	F. V. Albino DeSouza ...	.
†	Hirálál Manilál Dhru ..	...
	Dámodar Mádhavráo Dukle ..	..
	Franzone A Fáriá	...
	Bhikaji Edalji Ghásválá ..	...
†	Gabriel F Gonsalves	...
	Henry William Grogan .	.
	Govindás Kalliandás Khadepáu...	..
	Fakirji Kávasji Mándviválá ...	...
	Dádobá Janárdan Mantri... ...	..
†	Mervánji Dádábhái Mistri ...	...
	Kaikhosru Jamshedji Modi ...	...
	Vishnu Mahádev Námjoshi ...	...
	Nasarvánji Mervánji Párakh	...
	Bhái Ganpatráo Patel	...

* Passed the First Examination for the Degree of L M. & S
† Free students
‡ Passed the F.A. Examination

	Foundation.
† Nicholas Francis Pereira... ...	...
Ardesir Dádábhái...	...Government Exhibition.
Frámji Edalji Dávar	...
Bábáji Sarottam Mánkar... ...	..
Manchersháh Mothábhái Vakil ...	...Reid.
Dhanjibhái Sorábji Masáni ...	...Anderson.
Krishnáji Trimbak Gokhale ...	...Anderson.
Vásudev Vináyak Chhatre ...	.. Farish.
Hormasji Kávasji Dotiválá ...	...Carnac.
Dhanjibhái Sorábji Dallas ...	...Carnac.
* P. M. Pinto	...Government Exhibition.
* Bamanshah Kharshedji Anklesariá	...
Dáráshah Jamshedji Mowdáválá	...
Lewis Gomes, B.A.	...
Krishnáji Govind Nivasarkar ...	...
Thomas H. Corkery	...
A. P. Fernandes	...
Ardesir Jamshedji Keláválá ...	...
Ardesir Behrámji Masáni ...	...
H. W. Richardson	...
Dinsháh Edalji Sabjá	...
Virji Zíná Raval	...
Rámchandra Narsinh Mudholkar	...
† Sorábji Kávasji Doctor	...
Pálanji Pestanji Bhedvár ...	...
Umeshankar Dámodar Trivedi ...	...Gondal State Scholarship.
Báji Bálkrishna Bháte	...
Murárji Náranji Bhat ...	...
Francis H. DeCosta ...	...
Shávaklál Mánıklál Dave ...	...Gáekavád Scholarship.
Hormasji Behrámji Dastur ...	...
T. T. Wright	...
Sorábji Kharshedji Táráchand ...	...
M. L. Ray	..
Mervánji Temulji Vaid	...
† Lakshuman Ganpat Máne ...	...
Mervánji Dádábhái Masáni ...	...
† Kávasji Mancherji Langráná ...	...
Joseph DeSouza	...
D. F. DeMello	...

* Passed the F. A. Examination.
† Free student.

	Foundation.
Govind Bábáji Kher	
Kaikhosru Dhanjisháh Doctor	
V. J. Pinto	
Sorábji Kharshedji Mehtá	
† Bápuji Navroji B. Khambátá	
Frámji Jivanji Gilder	
Ratanji Bejanji Soneválá	
Dáráshah Edalji Kotháválá	
† Frámroz Pestanji	
Venkatesh Balvant Karandikar, B.A.	...Government Exhibition.
Purshottam Náráyan Davdá	
Vithal Annáji Salgar	...Dhárvád and Government Scholarship.
P. J. Svámi	...Government Scholarship.
Táráchand Jerámdás Gangárámáni	...Sind Exhibition and Government Exhibition and Scholarhsip.
Sorábji Frámji Kápadiá	...Government Scholarship.
M. L. F. DeGama...	...Government Scholarship.
Sorábji Jamshedji Dáruválá ...	...
† Dhanjibhái Rastamji Tátá ...	...
Edalji Mánikji Modi	...
Ismael Jan Muhámmad	...
Khusháldás Karsanji Joshi ...	...Sir Jasvantsingji Scholarship.
Maganlál Motirám Modi	...
F. X. Ferreira	...
Vináyak Dádáji Sátgharé ...	...
Ratanji Edalji Modi	...
Ratansháh Mánikji Modi	...
Jamshedji Fardunji Kámdin ...	...
A. G. Pereira	...
Shámráo Ganpat Kamlákar ...	...
B. A. K. Lukmánji	...
Ganesh Vishnu Kher	...
G. T. DeCunha	...
Dhanjibhái Hormasji Mehtá ...	...
Behrámji Sorábji Postválá ..	...
Chhabildás Tribhuvandás Master	...
Dorábji Hormasji Pochkhánáválá	...

† Free student.

Foundation.

Chunilál Dharamdás Saraiyá ... ...
Karsandás Gopáldás Sethná ... .
Dhanjibhái Edalji Anklesariá . ...
Rastamji Navroji Unválá . ...
Bápu Dhondsett Bhogte... ... ...
Frámroz Sávakshah Dávar ... . .
Jamshedji Mancherji Mulán ... ...
Dhanjibhái Sorábji Mehtá ... ...
Dárásháh Dinsháh Writer . ...
Kapilvantrám Narbherám Pandiá ...
H. Azavedo . ...
E. H Dias . ...
Sorábji Hormasji Modi ... ...
Chandulál Gopáldás Tolat ... ...
A. Sutton . .. .
Krishnáji Káshináth Gokhale ... ..
Bháu Janárdan Mantri ... ...
† Mancherji Jamásji Mistri ... ...
Madanlál Lallubhái Munsiff ... ...
M. E. Hearn ... .
V. P. DeSa ... ...
M. V. C. Marquis ... .
Rastamji Ardesir Dádimaster .. ...
Fardunji Sorábji Kápadiá ... ..
Vithaldás Narbherám Mehtá ... ...
Vináyak Anandráo Ranjit ... ...
Hari Vishnu Barve ... ...
Fardunji Nasarvánji Bisni .. ...
Shápurji Dosábhái Bharuchá . . ..
Gopináth Chintáman Chitnis ... ...
Dosábhái Kávasji Patel . . . .
Rastamji Nánábhái Ránimá ... ...
Sanmukh Venkatchalam Mudliar ...
Khairshedji Ratanji Kápadiá . ...
Mánikji Bápuji Láheválá .. ..
Frámroz Dorábji Mus ... ...
Ganpat Annáji Sirur ... ...
J. D. DeSilva ... .
Mothábhái Dádáji Kotháre . ...
Ardesir Dhanjisháh Contractor ...
Vithal Lakshuman Agrankar . . ...
Nasarvánji Ratanji Master . . .
Bábulji Sadáshiv Sanjit ... . .
Mahádev Venkatesh Lele, B.A , L.C.E. Government Exhibition.

† Free student.

	Foundation.
Mancherji Kávasji Kángá, B.A.	...Sir Cowasjee Jehangier.
Dvárkánáth Rámnáth Khote, B.A.	...Sir Cowasjee Jehangier.
Tribhuvandás Kalliándás Gujjar, B.Sc.	Government Exhibition.
Navroji Mancherji Lákdáválá ...	...Government Scholarship.
Vishnu Rámchandra Kirloskar ...	...Government Scholarship.
Hari Váman Bhat	...Government Scholarship.
Krishnáji Ganesh Deshpánde ...	...Government Scholarship.
Báláji Vishvanáth Dhurandhar ...	...Government Scholarship.
Anandráo Sundarji Dharádhar ...	...Jamkhindi Scholarship.
F. A. Foy	...
Atmárám Náráyan Mhátre ...	...
Mahádev Krishna Pánsare ...	...
Hormasji Manikji Másiná ...	...
E. G. R. Whitcombe	...
Rámnáth Bhái Rupji	...
Moreshvar Ganesh Bodas... ...	...
Jehángier Ardesir Kohiyár ...	..
Káshináth Váman Káne ...	...
Vajerám Sákerrám Diván... ...	...
Thomas John Waite	...
Shridhar Nityarám Mehta ...	...
Jehángier Kharshedji Commissariválá	...
D. B. Alvares ...	...
Chunilál Javerilál Khanderiá ...	...
Navroji Kávasji Kalliánválá ...	...
A. Britto	...
Fardunji Edalji Sherdiválá ...	...
Abraham Hyams	...
Váman Janárdan Mhátre ...	...
Kharshedji Pestanji Boyce ...	...
Gulabrái Durgárám Dave ...	...
Chunilál Fakirbhái Dallál ...	..
Bábáji Bápuji Vijayakar	...
Bápuji Rastamji Wádiá	...
Kharshedji Jamshedji Kheniá ...	...
Dámodardás Karsandás Mehtá ..	...

Phirozsháh Dhanjisháh Bháglá .
Ardesir Frámji Bahádurji .
Bamanji Behrámji Doctor . .
Dáyábhái Narottamdás Patel ... ...
P S De Silva .. ..
Ratanji Shápurji Gándhi ...
Purshottam Rámchandra Pilgávkar ...
A F. Ward .. . ...
Pránjivan Jagjivan Mehtá . ...
Shávakshá Ratanji Sethná ...
Dhanjibhái Merváuji Munshi ... ...
Frederick William Cooper .. ...

X.—POONA COLLEGE OF SCIENCE.

(RECOGNIZED 1865.)

The Poona College of Science (formerly the Poona Civil Engineering College) arose out of a school established in Poona in 1854 by Government, at the suggestion of Lieut.-Colonel (now Major-General) Walter Scott, Bombay Engineers, for the purpose of educating subordinates for the Public Works Department.

The College is under the control of the Principal, who is subordinate to the Director of Public Instruction.

The College is divided into four Departments :—

1. Matriculated Students who are educated through the English language for University Degrees in Civil Engineering.

2. Matriculated Students who study Scientific Agriculture in the College and the farm attached to it, and who obtain certificates of qualification from the College.

3. Matriculated Students who enter the Forest Branch of the College, to which Branch six appointments have been guaranteed annually by the Bombay Forest Department.

4 Students, who prosecute their studies in the College and the Workshops attached to it, with the object of becoming educated Maistries.

Attached to the College are workshops where practical instruction is conveyed to the students, and where work of various kinds is executed for Government and the Public

In July 1863, Cowasjee Jehanghier Readymoney, Esquire, offered to Government the sum of Rupees 50,000 to assist in the erection of suitable Buildings for the College. The foundation-stone was laid by His Excellency Sir Bartle Frere on the 5th August 1865.

Fellowships.

Four Fellowships of Rs. 25, each tenable for one year, are attached to the College.

Scholarships.

The following Scholarships, each tenable for one year, are annually open for competition :—

1	of Rs.	15	per mensem.
1	„	12	„
3	„	10	„
1	„	9	„
5	„	8	„
3	„	7	„
4	„	6	„
10	„	5	„
2	„	4	„
2	„	3	„
1	*McDougall Scholarship* of	Rs. 6	per mensem.
1	*Frere Scholarship* of	„ 25	„

McDougall Scholarship.

On the retirement from India of the Rev. James McDougall in 1862, a subscription was raised by the ex-Students of the Poona Civil Engineering College for the purpose of perpetuating in the then school the name of its former Principal. A sum of Rupees 1,300 was subscribed, and from the interest accruing from this sum the amount of Rupees 72 is placed annually at the disposal of the Principal, to be awarded as a Scholarship to the most deserving student.

Frere Scholarship.

At a meeting of the Native inhabitants of Poona held on 11th November 1866, Khán Bahádur Padamji Pestanji presiding, it was resolved—That, in order to perpetuate in Poona the memory of His Excellency Sir Bartle H. E. Frere, a fund be raised, and a Scholarship in connection with His Excellency's name be established in the Poona Civil Engineering College. This Scholarship, value Rupees 25 per mensem, is tenable for one year, and will be conferred on that student who shall have obtained most marks in the preceding First Examination in Civil Engineering, provided that he shall not at the same time hold a Fellowship or Scholarship in any College affiliated to the University.

List of Principals.

1854. The Rev. James McDougall.
1857. Henry Coke, M.A.
1859. Captain G. Close, R.E.
1864. Captain H. Wilkins, R.E.
1864. Theodore Cooke, M.A., M.I., LL.D., F.G.S.

1882.

Principal.

Theodore Cooke, M.A., M.I., LL.D., F.G.S., M. Inst. C.E.I.

Professors and Teachers.

Samuel Cooke, M A., F.I.C., F.G.S., Assoc. M. Inst. C.E., Professor of Chemistry and Geology.

James Scorgie, Mem. Soc. Eng., Professor of Mechanism and Applied Science.

Ráo Bahádur Dájı Nılkanth Nagarkar, Professor of Mathematics and Civil Engineering.

William Shearer, Instructor of Agriculture.

Nánábhái Ardesir Mus, L.C.E., Instructor of the Forest Class.

Hastings, M. Page, Demonstrator of Practical Chemistry and Geology.

Fardunji Mancherji Dastur, M.A., Assistant Professor of Mathematics.

Raghunáth Vináyak Dhairyaván, Drawing Master.

G. M. Woodrow, Teacher of Botany.

C. W. Dudley, L.C.E., Head Teacher of the Maistry Class. *(On leave.)*

Bamanji Hormasji Pávri, L.C.E., *Acting* Head Teacher of the Maistry Class.

Mártand Ganesh Panse, Assistant Teacher of the Maistry Class.

Robert Royal, Superintendent of Workshops.

Librarian.

Balvant Vináyak Gokhale.

I.—Civil Engineering Department.

Fellows.

* Mangeshráo Kátre.
* Ibráhim Shaik Dáud Ahamadi.
* Bháilál Purshottamdás Sháh.
* Mánikji Kávasji Bámji.

Frere Scholar.

M Visvesvaraiya, B.A

Undergraduates holding Scholarships.

Third-year Students.

Narso Govind Joshi.
* Moro Govind Joshi
* Sitárám Sambhásiva Varanásivar.
* Kharshedji Frámji Chhápgar
* Ardesir Nasarvánji Thánáválá.

Second-year Students

Káshináth Dámodar Dhekne.
Parshurám Krishna Chitale.
Datto Bálkrishna Vaidya
Bálábhái Gulábchand Korá.
Bechardás Chhaganlal Parikh.
Rámayá Sambháyá Challávaru.
Bhagvant Sakhárám Kirtane
Rudishankar Girjáshankar Oza
Vináyak Rámchandra Jálnápurkar.

First-year Students.

Bálkrishna Váman Dhume.
C Chackravarty
Appáji Rámchandra Kulkarni
Rámchandra Shrinivás Kulkarni.
Lakshuman Dáji Nagarkar.
Chunilál Jethábhái Mehtá
Váman Náráyan Barve

* Has passed the F. C. E. Examination.

Ganesh Váman Gadre.
Balvant Gangádhar Potnis.
Govind Ganesh Junre.

Undergraduates not holding Scholarships.

Third-year Students.

* C. M. Anandtirtha Ráo.
* Kávasji Bejanji Sethná.
* Nánábhái Dádábhái Sátáráválá.
* Vithal Bálkrishna Dáte.
* Gavarishankar Harjivandás Vyás.
* Jehángier Mancherji Billimoriá.
* Krishnáji Vishnu Joshi.
* Lallubhái Govinddás Mehtá.
* Subráo Venkatesh Yadgiri.
* Náráyan Janárdan Joshi.
* Navroji Hormasji Kátrak.
* Narsingráo Krishnayá Kátre.
* Rastamji Hormasji Mádan.
* Ardesir Kávasji Patel.
* Sorábji Jamshedji Dáji.
* Váman Náráyan Dev.
* Hormasji Jamshedji Kotvál.
* Vásudev Keshav Kunte.
* Kharshedji Hormasji Mistri.
* Gangádhar Ballál Apte.
* Hari Bhikáji Bhándáre.
* Nasarvánji Mancherji Dalál.
* Balvant Ganesh Deshpánde.
* Vishnu Vithal Gole.
* Ardesir Hormasji Tádiválá.
* Kilábhái Dulabhrám Dalál.
* Ganesh Khanderáo Tipnis.
* Gangádhar Sadáshiv Gokhale.

Second-year Students.

Hari Báláji Khatáv.
Mánkeshvar Gopál Mhaskar.
Chhaganlál Govindlál Kinkhábválá.
Harkisandás Dharamdás Khánvazir.
Hari Vishnu Lele.
C. Halaganjá Gaudá Basavá.
B. C. Mádan.
Kongatti Appá Punáppá.

---

* Has passed the F. C. E. Examination.

Dámodar Pándurang Deshpánde.
Náráyan Krishna Dighe.
K. Ponnappá.
Rámchandra Balvant Bhágvat.
Panpanápully Bhimsenráo.
B. Subráo.
Bálkrishna Moreshvar Sáthe.
C. Madhva Jayasinhráo.
Pándurang Eknáth Dharádhar.

First-year Students.

Vithal Vishnu Chitale.
Rámchandra Krishna Khádilkar.
Govind Krishna Maráthé.
Shivrám Káshináth Bhágvat.
Krishnáji Venkatesh Yadgiri.
Rámchandra Sakhárám Bhátavadekar.
Gokuldás Rájpál Mehtá.
A. C. Robinson.
C. Tudball.
W. Dracott.

Students paying quarter fee.

* Náráyan Dattátraya Garde.
Sitárám Hari Ajrekar.
Krishnáji Hari Patvardhan.
Bháu Krishna Dámle.
Rámchandra Sheshgiri Amládikar.
Hari Rámchandra Chakradev.
Jagannáth Ganesh Budhe.
David Lucas Joshi. a

Free Students.

Abdullá Ibráhim Atár.
Rámchandra Anant Náik.

II.—Agricultural Department.

Keshav Bápu Vádekar.
Navroji Kávasji Contractor.
Nágesh Káshináth Lele.
Náráyan Vishvanáth Nene.
Keshav Gopál Tumne.
Vishnu Krishna Kále.
Ganesh Sadáshiv Joshi.
Kávasji Dhanjibhái Mahálakshumiválá.

---

a Has passed the F.C. E. Examination.

Pestanji Dhanjibhái Mahálakshumiválá.
Gopál Dhonddev Nigudkar.
Dulabhji Narshi Trivedi.
Máruti Vishnu Dhavle.

III.—Forest Department.

Dinkar Náráyan Dámle.
Váman Gopál Tumne.
Dinkar Purshottam Páthak.
Hari Gopál Parándekar.
Rámchandra Ballál Godbole.
Nandlál Bholáshankar Dikshit.
Rámchandra Krishna Sabnis
Trimbak Sakhárám Sahasrabudhe.

XII.

A Statement of Endowments and Benefactions.

ENDOWMENTS.

I. The Munguldass Nathoobhoy Travelling Fellowship	Rs.	20,000
II. The Manockjee Limjee Gold Medal.....	"	5,000
III. The Bhugwandass Purshotumdass Sanskrit Scholarship.....	"	10,000
IV. The Homejee Cursetjee Dady Prize.....	"	5,000
V. The Jugonnath Sunkersett Sanskrit Scholarships..	"	20,000
VI. The Jam Shri Vibhaji Scholarship	"	4,500
VII. The Cowasjee Jehanghier Latin Scholarship	"	5,000
VIII. The Kinloch Forbes Gold Medal	"	5,000
IX. The David Sassoon Hebrew Scholarship ...	"	5,000
X. The James J. Berkley Gold Medal	"	8,000
XI. The Ellis Prize	"	1,500
XII. The Hebbert and La-Touche Scholarship ...	"	5,000
Carried forward...Rs.		94,000

	Brought over.....	Rs.	94,000
XIII.	The Wilson Philological Lectureship	„	23,500
XIV.	The Ellis Scholarship ...	„	7,500
XV.	The Chancellor's Medal..	„	...
XVI.	The Arnould Scholarship.	„	6,000
XVII.	The Duke of Edinburgh Fellowship	„	10,000
XVIII.	The Bai Maneckbai Byramjee Jeejeebhoy Prize	„	2,000
XIX.	The Ráo Sir Pragmalji Scholarships	„	30,000
XX.	The Sir Jasvantsingji Scholarships	„	25,000
XXI.	The Karsandas Mulji Prize	„	3,000
XXII.	The Dossabhoy Hormusjee Cama Prize ...	„	5,000
XXIII.	The Hughlings Prize ...	„	2,500
XXIV.	The James Taylor Prize.	„	2,500
XXV.	The Bhau Daji Prize...	„	5,000
XXVI.	The Venayekrao Jugonnathji Sunkersett Prize	„	4,500
XXVII.	The Mervanji Framjee Panday Scholarship...	„	6,000
XXVIII.	The Kahandas Mancharam Scholarship	„	6,000
XXIX.	The Dhirajlal Mathuradas Scholarship	„	6,000
XXX.	The Sinclair Prize	„	1,500
XXXI.	The Gibbs Prize	„	2,000
XXXII.	The Narayan Vasudev Scholarship	„	5,000
	Carried forward ...	Rs.	2,47,000

	Brought over	Rs.	2,47,000
XXXIII.	The Cobden Club Medal.	„	...
XXXIV.	The Sir George Le Grand Jacob Scholarship	„	3,000
XXXV.	The Sir George Le Grand Jacob Prize	„	11,000
XXXVI.	The Jairazbhoy Peerbhoy Scholarship	„	5,000
XXXVII.	The Varjivandas Madhavdas Sanskrit Scholarship	„	5,000
			2,71,000

BENEFACTIONS.

I.	University Hall.....	Rs.	1,00,000	
II.	University Arms and Common Seal	„	1,200	
III.	University Library Building	„	2,00,000	
IV.	The Rajabai Tower with Clock and Peal of Bells.....	„	2,00,000	
V.	Mace for the University.	„	1,200	
VI.	The Gibbs Library	„	12,808	
				5,15,208
	Total.....	Rs.		7,86,208

THE UNIVERSITY OF BOMBAY.

The total annual value of Endowments at present is Rs. 11,195

The total amount of Benefactions received is Rs. 5,15,208.

Ten Institutions are recognized by the University of Bombay.

The number of Matriculated Students is 4,818.

Results of Examinations of the University of Bombay for the Year 1881-82.

	Number of Candidates	Candidates.				Passed.				Religion of Passed Candidates.						Class.*		
		Government Institutions.	Schools in Native States	Private Institutions	Private Students.	Government Institutions.	Schools in Native States.	Private Institutions	Private Students	Christians.	Hindus.	Pársis.	Muhammadans.	Others.	Europeans.	First	Second	Pass.
Matriculation Examination ..	1,374	491	83	375	425	190	38	124	36	10	294	52	2	3	26	..		
Previous Examination .	278	182	15	81	..	41	4	26	.	..	47	21	2	1	.	2	3	61
First Examination for B.A. ..	88	66	..	22	..	24	..	10	..	.	22	12	.	..	..	1	2	31
B A Examination .. .	125	90	..	35	..	28	..	8	..	..	27	9	..	.	..	1	8	27
First B.Sc. Examination .	2	2	..	..	..	2	..	..	..	..	2		..	.	..	1	2	..
Second B.Sc. Examination ..	7	6	..	1	..	1	..	1	..	..	1	1	..	..	..	1		1
M A Examination .. .	8	6	..	4	..	1	..	2	..	..	2	1	..	..	..	..	1	2
LL B. Examination .. .	26	26	..	..	..	5	..	..	..	..	4	1	..	.	.		2†	..
Honours in Law Examination	.	..	..	..	..	..	..	..	..	..		..	..	..	..		..	
First Examination in Medicine and Surgery .. .	41	41	..	..	..	23	..	..	..	2	7	12	.	..	2	4	19	..
L.M & S. Examination ..	22	22	..	..	..	14	..	..	..	..	3	11	..	..		5	9	..
First Examination in Civil Engineering	22	22	..	..	..	15	..	..	..	..	10	5	.	..	..	2	6	7
L.C.E Examination	24	24	..	..	.	16	..	.	.	..	10	5	.		1		8	8
M.C E. Examination		.	..	.	..	..	..		.	..		..		..	..			..
Number of Candidates	2,017	976	98	518	425	360	42	171	36	12	429	131	4	4	29	17	65	137

* Applies to higher Examinations only, and not to Matriculation Examination. † Division.

XIII

Convocation for Conferring Degrees, 1881-82.

The TWENTY-FIRST Convocation of the University o Bombay for Conferring Degrees was held on Tuesday, th 24th January 1882, in the Sir Cowasjee Jehanghier Hall o the University of Bombay.

The Members of the Senate present on this occasior were as follows :—

The Vice-Chancellor

The Honourable Mr. Justice WEST, C.S., M.A., F R G.S

Deans.

The Honourable J. B. PEILE, C.S., C.S.I., M.A.
The Honourable F. L. LATHAM, M.A.
W. J. MOORE, M.D., L.R.C.P. Edin.
F. MATHEW, Mem. Inst. C.E.

Syndics

W WORDSWORTH, B.A.
C. E. FOX, M.A.
C. CHAMBERS, F.R.S.
KASHINATH TRIMBAK TELANG, M.A., LL.B
The Honourable Ráo Sáheb VISHVANATH NARAYAN MANDLIK, C S.I., M.R.A.S
G. A. MACONACHIE, M.D., C.M.

The Registrar

PETER PETERSON, M.A.

Board of Accounts

Sir MUNGALDASS NATHOOBHOY, Knight, C.S.I

Member of Council

The Honourable L. R. ASHBURNER, C.S., C.S.I.

Judges of the High Court.

The Honourable Mr. Justice MELVILL, C.S.
The Honourable Mr. Justice PINHEY, C.S.

Members of the Legislative Council

The Honourable Sir JAMSETJEE JEEJEEBHOY, Bart., C.S.I.
The Honourable Ráo Bahádur GOPALRAO HARI DESHMUKH

Fellows.

Manockjee Cursetjee.
The Rev. Dhanjibhoy Nauroji.
Dhanjibhoy Framjee Patel.
A. N. Hojel, L. K. and Q.C.P.I.
Kharshedji Rustomji Cama.
I. B. Lyon, F.C.S.
Ráo Bahádur Shankar Pandurang Pandit, M.A.
Bal Mangesh Wagle, M.A., LL.B.
Lieut.-General J. A. Fuller, R.E., C.I.E.
W. Gray, M.B.
Khanderao Chimanrao Bedarkar, B.A., LLB.
Shantaram Narayan.
Atmaram Pandurang, G.G.M.C.
J. Pinkerton, M.D.
Nauroji Fardunji.
Harichand Sadashivji, Assoc. M. Inst. C.E.
D. S. Kemp, F.C.S.
Ráo Bahádur Nana Moroji.
Raghunath Narayan Khote.
Rahimtulah Muhammad Sayani, M.A., LL.B.
G. Atkinson, B.A., Sergeant-at-Law.
Homejee Cursetjee Dady.
Eduljee Nasservanjee, G.G.M.C.
Major G. L. C. Merewether, R.E.
Ráo Bahádur Ganpatrao Bhaskar.
Nanabhoy Byramjee Jeejeebhoy.
Ardesir Framji Moos.
Nanabhai Haridas, LL.B.
Nacoda Mohamad Ally Rogay.
Shantaram Vithal Sanzgire, L.M.
Khán Bahádur Jamsetji Dhanjibhai Wadia.
Framji Rastamji Vikaji, B.A., LL.B.
Javerilal Umiashankar Yajnik.
J. Anderson, K.L.S.
J. G. DaCunha, M.R.C.S., L.R.C.P.
J. T. Hathornthwaite, M.A.
Ráo Bahádur Vasudev Bapuji Kanitkar,
Ráo Bahádur Makund Ramchandra.
Sakharam Arjun Ravut, L.M.
P. Ryan.
Badrudin Tyabji.
Nanabhai Rastamji Ranina.
L. P. De Rozario, L.M.
S. Newcome Fox, B.A.
The Rev. J. M. Hamilton, S.J.

Jamshedji Ardesir Dalal, M.A., LL.B.
Jehangier Barjorji Vacha.
Kamrudin Tyabji.
J. C. Lisboa, G.G.M.C.
The Rev. D. Mackichan, M.A., B.D.
Varjivandas Madhavdas.
Cowasjee Hormusjee, G.G.M.C.
Philip Clement DeSouza, L.M.
The Rev. C. F. H. Johnston, M.A.
Yashvant Vasudev Athale, M.A., LL.B.
E B. Carroll, Mem. Inst. C.E.
Cowasjee Pestanji, G.G.M.C.
Joseph Ezekiel.
The Rev. H. C. Squires, M.A.
R. G. Walton, Mem. Inst. C.E.
G. Geary.
T. Cody, L.R.C.P.
A. H. Hughes, M.D., M.R.C.S.
D. Macdonald, M.D., B.Sc.
A. Barrett, B.A.
Cowasjee Nowrojee, G.G.M.C.
Kavasji Dadabhai Naegaumvala. M.A., F.C.S., F I.C.
H. C. Kirkpatrick, M.A.
Mancherji Navroji Banaji.
Pestanji Mancherji, G.G.M.C.
M. Starling, B.A., LL.B.
Bhagvanlal Indraji Pandit.
The Rev. B. Blake, M.A., B.D.
H. Curwen.
Kaikhosru N. Kabraji.
Shivshankar Govindram.
J. M. Sleater, Mem. Inst. C.E.
Ráo Bahádur Trimalrao Venkatesh Inamdar.
Vasudev Krishnarao Dhairyavan, B.A., LL.B.

Ráo Sáheb Ganpatrao Moroba Pitale, Assistant Registrar, carried the Mace.

The Members of the Senate having taken their seats, the Dean of the Faculty of Civil Engineering, F. Mathew, Mem. Inst. C.E., rising supplicated a Grace of the Senate as follows :—

> "Mr. Vice-Chancellor,—On behalf of Ráoji Ráburáo Angal, Khimchand Ravji Belani, Dhanjibhái Rastamji Bogá, Náthábhái Avichaldás Desái, Keshav Hari Gánu, Shripat Vishnu Mhaskar, Mánikji Ratanji Surveyor, Pránlál Káhándás Joshipárá, Kávasji Dádábhái Kángá, Kasanji Ranchhodji Náik, Timáji Venkatesh Náik, Parshurám Vithal Pandit, Bamanji Hormasji Pávri, Dorábji Temulji Pávri, and Bhagvánji Nágji Trivedi, of Poona College of Science, I submit the certificates required by this University. and move that the Senate do pass a Grace for their admission to the Degree of Licentiate of Civil Engineering."

Whereupon the Honourable the Vice-Chancellor put the question, "Doth it please you that this Grace is passed?"

and the Senate assenting, the Vice-Chancellor said: "This Grace is passed."

The Grace having been passed, the Dean in Civil Engineering presented the Candidates in the following words:—

"Mr. Vice-Chancellor,—I present to you the Candidates (named above) who have been examined and found qualified for the Degree of Licentiate of Civil Engineering, to which I pray they may be admitted."

Upon which the Honourable the Vice-Chancellor addressed the Candidates as follows:—

"By the authority given me as Vice-Chancellor of this University, I admit you, one and all, to the Degree of Licentiate of Civil Engineering, and I charge you that ever in your life and conversation you show yourselves worthy of the same."

The same words, *mutatis mutandis*, were used successively both for Grace and Admission on behalf of the Candidates for the Degree of Licentiate of Medicine and Surgery, Bachelor of Science, Bachelor of Arts, Bachelor of Laws, and Master of Arts; Deputy Surgeon-General Moore, M.D., the Dean in Medicine, supplicating for the Candidates in Medicine and Surgery; the Honourable J. B. Peile, M.A., Dean in Arts, supplicating for the Candidates in Science and Arts; and the Honourable F. L. Latham, M.A., Dean in Law, supplicating for the Candidates in Law.

The Registrar then made declaration of the Degrees conferred as follows:—

LICENTIATE OF CIVIL ENGINEERING.

Second Class.

Ráoji Bápuráo Angal ...	Poona College of Science.
Khimchand Ravji Belani ...	
Dhanjibhái Rastamji Bogá ...	
Nathábhái Avichaldás Desái ...	
Keshav Hari Gánu	
Shripat Vishnu Mhaskar ...	
Mánikji Ratanji Surveyor ...	

Pass.

Pránlál Kahándás Joshipará ...	Poona College of Science.
Kávasji Dádábhái Kángá ..	
Kasanji Ranchhodji Náik ..	
Timáji Venkatesh Náik ...	

Parshurám Vithal Pandit ...	Poona College of Science.
Bamanji Hormasji Pávri ...	
Dorábji Temulji Pávri	
Bhagvánji Nágji Trivedi ...	

LICENTIATE OF MEDICINE AND SURGERY.

First Class.

Vishnu Gopál Apte	Grant Medical College.
Fakirji Ratanji Bonesetter ...	
Navroji Bamanji Gandeviá ...	
Sorábji Mánikji Káká	
Ardesir Dádábhái Modi ...	
Behrámji Hormasji Nánávati ...	

Second Class.

Sorábji Ratanji Coachman ...	Grant Medical College.
Barjorji Hormasji Dántrá ..	
Lakshuman Bacháji Dhárgalkar.	
Dinsháh Jivájı Edal-Behrám ...	
Sadáshiv Váman Káne	
Dinshah Hormasji Motiválá ...	
Vishnu Jagannáth Shirgávkar...	
Barjorji Sorábji Shroff ..	
Rastamji Kharshedji Váchá ...	

BACHELOR OF SCIENCE.

First Class.

Jamshedji Edalji Dáruválá ... Free General Assembly's Institution, Bombay.

Pass.

Anant Venkáji Khot ... ... Elphinstone College.

BACHELOR OF ARTS.

First Class.

Krishnáji Balvant Wágle ... Elphinstone College.

Second Class.

Rámchandra Bálkrishna Bhágvat.	Deccan College.
Jivájı Kávasji Bharuchá ...	Deccan College.
Shridhar Keshav Dámle	Elphinstone College.
Ganesh Krishna Deshmukh ...	Elphinstone College.
Rámchandra Hanmant Deshpánde.	Deccan College.

Dinsháh Jijibhái Doctor ...	Free General Assembly's Institution, Bombay.
Moro Vishvanáth Joshi	Elphinstone College.
Mánikji Kharshedji Narimán ..	Elphinstone College.

PASS

Prabhákar Rámkrishna Bhándárkar.	Elphinstone College.
Harchandrái Vishindás Bhárváni.	Elphinstone College.
Bálkrishna Vishnu Bhide ...	Deccan College.
Ganesh Vishnu Dánge	Elphinstone College.
Kharshedji Frámji Dáruválá ...	Elphinstone College.
Jamshedji Barjorji Doctor ...	Elphinstone College.
Sundarráo Gajánan Jayakar ...	St. Xavier's College, *formerly* Free General Assembly's Institution, Bombay.
Vásudev Dáji Joglekar	Deccan College.
Ganesh Balvant Joshi	Elphinstone College.
Maheshvar Dhonddev Joshi ...	Free General Assembly's Institution, Bombay.
Jametrám Nánábhái Judge ...	Elphinstone College.
Mancherji Kávasji Kángá ...	Elphinstone College.
Hari Váman Kelkar	Elphinstone College.
Vásudev Bálkrishna Kelkar ...	Elphinstone College.
Dvárkánáth Rámnáth Khote ...	Free General Assembly's Institution, Bombay.
Ardesir Jamshedji Lálkáká ...	Elphinstone College.
Mahádev Venkatesh Lele ...	Deccan College.
Vishnu Káshináth Lele ...	Deccan College.
Girdharlál Bhánábhái Modi ...	Elphinstone College.
Rámchandra Raghunáth Nátu.	Deccan College.
Jehángier Barjorji Sanjáná ..	Free General Assembly's Institution, Bombay.
Dhondu Morobá Sanzgiri ...	St. Xavier's College, *formerly* Elphinstone College.
Kharshedji Dhanjibhái Shroff .	St. Xavier's College.
Venkatesh Abáji Sohoni ...	Deccan College.
Dinkar Bháskar Soman ...	Elphinstone College.
Balkrishna Balvant Sule ...	Elphinstone College.
Náráyan Moroji Vijayakar ...	St. Xavier's College, *formerly* Elphinstone College.

BACHELOR OF LAWS.

SECOND DIVISION.

Dattátraya Vishnu Bhágvat ...	Government Law School.
Kevalrám Mávji Dave . ..	
Gopál Rámchandra Gokhale ...	
Sorábji Mánikji Kángá ...	
Dayárám Gidumal Sháhání ...	

MASTER OF ARTS.

SECOND CLASS.

Shridhar Rámkrishna Bhándárkar.	Elphinstone College.
Dhanjishâh Hormasji Dastur ..	Elphinstone College.
Sorábji Mánikji Kángá ...	St. Xavier's College.

PASS.

Gopál Ganesh Agarkar	Deccan College.
Tribhuvandás Narottamdás Málvi.	St Xavier's College
Mancherji Kharshedji Sanjáná.	Free General Assembly's Institution, Bombay.

The Registrar then read the following Report :—

MR. VICE-CHANCELLOR,

I have the honour, by direction of the Syndicate, to lay before you and the Senate a Report of the Proceedings of the University since the last Convocation for Conferring Degrees, held on the 1st February 1881.

The Report mentions the principal results of the University Examinations, Endowments to the University, and the more important Academical events of the past year.

EXAMINATIONS.

Matriculation Examination.—This Examination was conducted, as last year, at Bombay, Poona, Ahmedábád, Belgaum and Karáchi. One thousand three hundred and seventy-four Candidates were examined.

The following is a statement showing the number of Candidates sent up from the various Schools and Private Tutors and the number of those who succeeded in passing the Examination:—

Schools	No. of Candidates sent up.	No. of successful Candidates
Elphinstone High School	125	39
Poona High School	54	23
St. Mary's Institution, Bombay	31	20
Belgaum Sirdárs' High School .	51	19
Rájarám High School, Kolhápur ...	26	18

Schools	No of Candidates sent up.	No. of successful Candidates
Dhárvád High School	23	16
Ahmedábád High School	36	14
Free General Assembly's Institution, Bombay.	20	13
Fort High School	51	13
Sir J. J. Pársi Benevolent Institution, Bombay.	24	11
Káthiawár High School, Rájkot ..	15	11
Surat High School	33	10
Barodá High School	24	10
Sátárá High School ...	16	9
Robert Money Institution .	17	8
Bombay Proprietary School ..	35	7
Surat Mission High School	22	7
Násik High School ...	13	7
Náráyan Jagannáth High School, Karáchi	12	6
Bahádurkhanji High School, Junágad ..	12	6
Bombay Scottish High School, Byculla ...	14	6
Haidarábád High School	15	5
New English School, Poona	17	5
Bishop's High School, Poona... ..	8	5
Ahmednagar High School	13	5
Belgaum London Mission High School .	16	5
Byramjee Jeejeebhoy High School, Thána	15	5
Nariád High School	10	3
Bhávnagar High School	6	3
Amráoti High School	6	3
Broach High School ...	9	3
General Assembly's Institution, Bombay .	8	3
Poona Mission Institution	7	3
St. Mary's School, Poona	4	3
Chandanvádi High School	25	2
Ratnágiri High School ...	15	2
Ahmedábád Irish Presbyterian Mission High School.	10	2
Dhuliá High School	10	2
Sávantvádi English School ..	6	2
John Connon (Scottish) High School	3	2
Karáchi Grammar School ..	3	2
Kárwár High School	7	2

Schools.	No. of Candidates sent up.	No. of Successfu Candidates
Haidarábád Mission High School ...	5	2
Akolá High School	2	1
Sir Cowasjee Jehanghier N. Z. Madressa...	4	1
Shikárpur High School	3	1
Bombay Alfred High School	9	1
The Indian High School	5	1
Gogá Mission School	1	1
First Grade Anglo-Vernacular School, Miraj	1	1
Indore English School	6	1
Poona Victoria School	2	1
Bhore Anglo-Vernacular School ...	1	1
Poona Native Institution	7	...
Bombay Private English School ...	9	...
Navánagar High School	5	...
Cathedral High School	3	...
Ahmedábád Private High School ...	11	...
Jehangier Mothábhái High School ...	4	...
Alfred High School, Cutch	4	...
Private Tuition	425	36
	1,374	388

Of the successful Candidates 164 took Sanskrit as their second language, 48 Latin, 8 French, 1 Portuguese, 45 Maráthi, 50 Gujaráthi, 19 Cánarese, 44 Persian, 5 Sindhi, 2 Hindustáni, and 2 Hebrew; 294 were Hindus, 53 Pársis, 26 Europeans and Indo-Europeans, 8 Portuguese, 2 Muhámmadans, 3 Jews and 2 Native Christians.

Previous Examination.—At this Examination there were 278 Candidates.

The following is a statement showing the number of Candidates sent up from each of the six Colleges and the number of those who succeeded in passing the Examination :—

Colleges.	No. of Candidates sent up.	No of Successfu Candidates
Elphinstone College	90	25
Deccan College	70	14
Free General Assembly's Institution, Bombay.	51	15
St. Xavier's College	30	11
Gujarát College, Ahmedábád	22	2
Rájárám College, Kolhápur	15	4
	278	71

Of the successful Candidates 47 were Hindus, 21 Pársis, 2 Muhámmadans and 1 a Jew. Of these 43 selected Sanskrit as their second language, 5 Latin and 23 Persian. 2 passed in the First Class and 8 in the Second Class.

First Examination for the Degree of B.A.—At this Examination, which was held in November last, there were 88 Candidates.

The following is a statement showing the number of Candidates sent up from each of the four Colleges and the number of those who succeeded in passing the Examination :—

Colleges.	No of Candidates sent up.	No. of Successful Candidates
Elphinstone College	38	12
Deccan College	28	12
Free General Assembly's Institution, Bombay.	6	2
St. Xavier's College	16	8
	88	34

Of the successful Candidates 22 were Hindus and 12 Pársis. 18 selected Sanskrit as their second language, 9 Latin, and 7 Persian. 1 passed in the First Class and 2 in the Second Class.

Examination for the Degree of B.A.—At this Examination there were 125 Candidates.

The following is a statement showing the number of Candidates sent up from each of the four Colleges and the number of those who succeeded in passing the Examination:—

Colleges.	No. of Candidates sent up.	No of Successful Candidates
Elphinstone College	53	19
Deccan College	37	9
Free General Assembly's Institution, Bombay.	16	4
St. Xavier's College	19	4
	125	36

Of the successful Candidates 22 took up Sanskrit as their second language, 7 Latin, and 7 Persian. In the selected groups 10 passed in History and Political Economy (Group B), 10 in Logic and Moral Philosophy (Group C), 7 in Mathematics (Group D), and 9 in Natural Science (Group E). 27 were Hindus and 9 Pársis. 1 passed in the First Class, and 8 in the Second Class.

First Examination for the Degree of B. Sc.—There were 2 Candidates for this Examination from Elphinstone College who succeeded in passing the Examination : one was placed in the First Class and the other in the Second Class. They both were Hindus.

Second Examination for the Degree of B.Sc.—At this Examination there were 7 Candidates, of whom 2 passed the Examination, 1 from Elphinstone College and 1 from Free General Assembly's Institution, Bombay. One was a Hindu and the other was a Pársi.

Examination for the Degree of M.A. in Languages.—There were 5 Candidates, of whom 3 passed the Examination, of whom 1 was placed in the Second Class. 1 had selected Sanskrit as his second language, and 2 Latin. 1 was

from Elphinstone College, 1 from Free General Assembly's Institution, Bombay, and 1 from St. Xavier's College.

Examination for the Degree of M.A. in Mathematics.—There was only 1 Candidate, who failed to pass the Examination.

Examination for the Degree of M.A. in Natural Sciences.—There were 2 Candidates who failed to pass the Examination.

Examination for the Degree of LL.B.—There were 26 Candidates from the Government Law School, of whom 5 passed the Examination in the Second Division. 4 were Hindus and 1 a Pársi.

First Examination in Medicine.—There were 41 Candidates from Grant Medical College, of whom 23 passed the Examination: 4 passed in the First Division, and 19 in the Second Division. 7 were Hindus, 12 Pársis, 2 Portuguese, and 2 Europeans.

Examination for the Degree of L. M. & S.—There were 22 Candidates from Grant Medical College, of whom 14 passed the Examination,—5 in the First Class and 9 in the Second Class. 3 were Hindus and 11 Pársis.

First Examination in Civil Engineering.—There were 22 Candidates from Poona College of Science, of whom 15 passed the Examination. 2 were placed in the First Class, and 6 in the Second Class. 10 were Hindus and 5 Pársis.

Examination for the Degree of L.C.E.—There were 24 Candidates from Poona College of Science, of whom 16 passed the Examination. 8 were placed in the Second Class. 10 were Hindus, 5 Pársis and 1 a European. In the selected subjects 4 passed in Analytical Geometry and Differential and Integral Calculus, 5 in Mining and Metallurgy, 5 in Mechanical Engineering, and 2 in Botany and Meteorology.

UNIVERSITY PRIZES AND SCHOLARSHIPS.

During the year under report the University Prizes and Scholarships were awarded as follows:—

SCHOLARSHIPS.

The Bhugwandass Purshotumdass Sanskrit Scholarship.—To Shridhar Rámkrishna Bhándárkar, of Elphinstone College.

The Jugonnath Sunkersett Sanskrit Scholarships.—First, to Lakshuman Chintáman Bodas, of New English School, Poona; Second to Narhar Bálkrishna Joshi, of Robert Money Institution.

The Cowasjee Jehanghier Latin Scholarship.—To Ignatius De Mello, of St.Mary's Institution, Bombay.

The David Sassoon Hebrew Scholarship.—To Ezra Ruben, of Robert Money Institution.

The Ellis Scholarship—To Mánikji Kharshedji Narimán, of Elphinstone College.

The Arnould Scholarship.—To Kevalrám Mávji Dave, of Government Law School.

The Rao Sir Pragmalji Scholarships.—First to Rághavji Jayakrishna Vyás, of Robert Money Institution. Second to Jagannáth Náráyan Parmánand, of Elphinstone High School.

The Sir Jasvantsingji Scholarships.—First to Motichand Javer Mehtá, and Second to Dulabhji Narshi Trivedi, both of Bhávnagar High School.

The Merwanjee Framjee Panday Scholarship.—To Mánikji Ratanji Surveyor, of Poona College of Science.

The Kahandas Mancharam Scholarship.—To Gokaldás Rájpál Mehtá, of Káthiáwár High School, Rájkot.

The Narayan Vasudevji Scholarship.—To Sundarráo Gajánan Jayakar, of St. Xavier's College, *formerly* Free General Assembly's Institution, Bombay.

PRIZES.

The Ellis Prize.—To Najafkuli Fredunbeg Mirzá, of Náráyan Jagannáth High School, Karáchi.

The Bai Maneckbai Byramjee Jeejeebhoy Prize.—To Alfred Millard, of Bombay Scottish High School, Byculla.

The Hughlings' Prize.—To Rámchandra Ghanashám Sabnis, of St. Xavier's College.

The James Taylor Prize.—To Mánikji Kharshedji Narimán, of Elphinstone College.

The Bhau Daji Prize.—To Ganesh Krishna Deshmukh, of Elphinstone College.

The Venayekrao Jugonnathji Sunkersett Prize.—To Krishnáji Hari Kirkire, of Elphinstone College.

The Sinclair Prize.—To Ambádás Ráoji Khánzode, of Amráoti High School.

The Gibbs Prize.—To Barjorji Jámásji Pádsháh, of Elphinstone College.

The Cobden Club Silver Medal.—To Vásudev Bálkrishna Kelkar, of Elphinstone College.

TRAVELLING FELLOWSHIP.

The Munguldass Nathoobhoy Travelling Fellowship was awarded to Govindráo Bháu Prabhákar, L.M. & S., of Grant Medical College.

PHILOLOGICAL LECTURESHIP.

The Wilson Philological Lectureship.—Professor Macmillan was elected to deliver these Lectures on "Latin and Greek" for 1881-82.

ENDOWMENTS.

1. Mr. Jairazbhoy Peerbhoy, a Justice of the Peace, offered to the University a sum of Rs. 5,000 in 4 per cent Government Paper for the purpose of founding a Scholarship to be annually awarded to the Muhámmadan candidate who passes the Matriculation Examination with the highest number of marks and prosecutes his studies in this University, or proceeds to England with the same view

At a Meeting of the Senate held on the 1st October last, this offer was accepted with the best thanks of the Senate.

2. Mr. Varjivandás Mádhavadás, a Justice of the Peace and Fellow of the University, has lately offered to the University a sum of Rs. 5,000 in 4 per cent. Government Paper for the purpose of founding a Scholarship to be annually awarded to the candidate who passes the First Examination for the Degree of B A. with the highest number of marks in Sanskrit This offer will soon be submitted to the Senate for their acceptance.

BYE-LAWS AND REGULATIONS.

The most important alteration in the Bye-Laws and Regulations made during the last year was the abandonment of the limit of age below which Candidates were not allowed to present themselves for Matriculation. Further concessions have been made to Graduates in Science who may be desirous of taking Degrees in Medicine and in Arts. And the Senate have lately, after consideration extending over a series of meetings, adopted, with certain modifications, a scheme laid before it by the Syndicate for new Bye-laws which it is intended to substitute for the exisiting ones. The scheme is now before His Excellency in Council for sanction according to the Act of Incorporation.

The Baroda High School, having been raised to the rank of a College under the style of the Baroda College, has been recognized in the Faculty of Arts for the purposes of the Previous Examination.

The Vice-Chancellor's Speech

The Honourable the Vice-Chancellor then addressed the Senate as follows:—

Gentlemen of the Senate,—It was the intention of His Excellency the Governor to preside at this Convocation as Chancellor of the University. You know too well the calamitous events which have devolved on me a function which I can but very imperfectly perform. We miss to-day and every day a gracious presence which diffused a benign and kindly influence wherever it appeared. I feel that I but express the universal sympathy when I give these few words of sorrowing commemoration to a loss which has been felt as a personal misfortune in each household of our community, and must for long cast a shade of sadness over every public ceremony.

Amongst the labours of the year the chief undoubtedly is the general re-casting of the Bye-laws of the University. In this work the Senate at large has taken its full share. It bears its share of the responsibility. The Bye-laws will, I trust, ere long be sanctioned by the Government, and then it will be your part, gentlemen, first by a careful study of the Bye-laws, and then by a wise and consistent administration of them, to make the Senate a pattern of what a

deliberative body should be—courteous, candid, fair in argument, tolerant, business-like, free from cant, and free from faction. The swift succession of events must bring many important questions before you. I shall probably have no voice in their decision, but I shall feel some pride when I find that they are discussed and disposed of to the honour of the University under rules for the framing of which I have myself in a measure to answer.

The other principal events of the academical year have been brought before us in the report just read by the Registrar. The number of candidates for the higher instruction continues as large as could be expected; the number of failures to pass the examinations is greater than can be desirable. Many youths I believe stand for the Matriculation Examination just, as they say, to "try their luck", but this endeavour to get through examinations on the lowest possible terms cannot but exercise a rather demoralizing influence. In the interests of the University and of sound scholarship we must hope that a somewhat stricter discrimination will gradually be used by schoolmasters in giving their pupils the qualifying certificates. The defects I have noticed are most conspicuous in the case of the private schools. The number of candidates from these schools steadily increases, which is in itself a very gratifying fact; but the proportion of passes is miserably low, showing how great room there is for improvement in the matter and the method of their teaching.

It is perhaps due in no small measure to the system to which I have adverted that so many students fail in the further examinations requisite for obtaining their degrees. In the Previous Examination this year only about one-fourth of the candidates passed, and even from an institution like the Deccan College, only fourteen candidates out of seventy were successful. In the First Examination for the B.A. Degree the results were more satisfactory, but still less than half the candidates passed. In the Second Examination for this degree the successful candidates were about two-sevenths of the whole,—a small proportion I cannot but think, considering the known ability and zeal of the Professors in the several colleges. The truth seems to be partly that the preliminary training is defective, and partly that youths of inferior abilities, who are not likely ever to be successful students, are not weeded out

with a sufficiently rigorous kindness. The aptitude for scholarship is not universal, and disappointment must often result from setting naturally dull boys to tasks which call for at least an average measure of intellectual acuteness

In the professional examinations, or at least in those for Medicine and Engineering, the proportion of successful candidates has been much larger. The teaching must be deemed highly effective, and the students having a well-defined and limited course set before them achieve it remarkably well. Native society must gain largely by the accessions of accomplished professional men whom it now annually receives from this and the sister institutions. The supply is in such cases likely to create or increase the want, and there is an almost unlimited field opening before those especially who adopt the medical profession, as old prejudices fade away, and sufferers relieved from pain spread confidence in the science which has restored them.

You have heard, gentlemen, I am sure, with pleasure of the recognition by the University of the College at Barodá. It is thus not only at Poona or Áhmedabad within our own territories, but at places like Kolháp̄ur and Barodá, that the University makes its presence felt, and determines the general scheme of instruction. Great results must in the end follow from this wide diffusion of the means of advanced education. The system is as yet in its infancy, but it is while young that an institution, like a human being, receives most readily a permanent impress of disposition and tendency. We must rejoice, therefore, that the College at Barodá has secured the services of men of real distinction in attainments and character. In Gujarát, as much as anywhere, we find the precocity, receptiveness, and mobility of the Hindu mind. Able and high-minded teachers may mould such materials to noble uses. On us it devolves to aid them and all similarly situated by our sympathy and our discipline. The responsibilities of the University in this respect are daily growing; but the faculties have hitherto known well where good workers were to be found, and the Syndicate, filled as it has been, will, I doubt not, deal successfully with every task that is thrown upon it, so far at any rate as University arrangements can suffice for the exigencies to which time must inevitably give birth.

The limitation by which candidates for matriculation were formerly required to be sixteen years of age has in

the past year been abolished. There are, no doubt, some branches of study for which a certain maturity apart from mere cleverness or scholarship is desirable. On this account different views may be taken of the expediency, in the abstract, of the change that has been made; but its practical justification lies in the fact that the old rule could not be maintained without a risk, or even certainty, of evasions which placed the really conscientious candidate at a disadvantage. The examination for matriculation is of a kind that will generally exclude boys who are unprepared to benefit by a college course; and the example of some of the most eminent Englishmen shows that no harm, to say the least, arises in most cases from a reasonable indulgence to precocity. A year too soon at college is better than a year too long at school, and the choice rests virtually between these alternatives. Of the candidates under sixteen who have this year presented themselves, it is to be observed that a much larger than the average proportion have passed the examination.

While the path of the diligent student has thus been made smoother and instruction has been placed at his door, the positive encouragements held out to him have once more been increased. Not a year has passed since this University began to work, but some generous gift has added to its resources. The hall in which we are assembled —admirable in all respects save its acoustic properties; the neighbouring library with its noble Tower—soon now to be furnished with its clock and peal of bells—and an increasing group of scholarships and other prizes—all these are testimonies to the interest felt in learning by the community of Western India, and of its confidence in the system of this University. This year Mr. Varjivandás Mádhavdás comes forward with a gift of Rs. 5,000 to endow a scholarship to be held by a student proceeding from the first to the second examination for the degree of Bachelor of Arts. The donor desires that the scholarship may bear his name, and I know no more truly respectable mode by which a wealthy man can bring the correlation of forces into play in turning riches into fame, than by gaining a commemoration, and a blessing every year in this noble hall for his aid to the cause of enlightenment and progress. You will join me therefore, gentlemen, in a hearty acknowledgment of the bounty of Mr. Varjivandás Mádhavdás. You will by and bye give effect to his intentions, and you will share

my hope that the stream of generosity by which we have so largely benefited will continue to flow in undiminished volume in the years to come. Our Library has this year been enriched by the collection made in honour of our late Vice-Chancellor. Its capacious shelves, however, still afford room for many other volumes, and if generosity is anywhere seeking an outlet or a worthy purpose at this moment, I venture to suggest that one may be found in adding to the treasures from which generation after generation of ardent scholars will, we may hope, draw instruction and encouragement.

The number of students who have succeeded in obtaining degrees this year in Arts and Law is rather smaller than usual. The credit is all the greater to those who have passed the ordeal, while those who have been sent back to study for another year will probably one day bless the necessity to which they have to bend, in going through a further course of tuition. Without drawing invidious comparisons I will say that I think there are special advantages in the system of teaching which the Bombay University enforces The student must not only prepare himself for examinations, but he must attend stated courses of lectures in approved institutions. This implies residence in the neighbourhood, and a severance in many instances from embarrassing associates and associations, enabling him to devote his mind with more complete abandonment to the work set before it and to distinctly academical influences. He is subjected to a prolonged intellectual discipline and learns to bend his mind to the task which duty imposes, whether the inclination be present or not, and with patient attention to those minute details which are most irksome, but the mastery of which is essential to thorough and substantial scholarship either in literature or in science. Such a course of training seems to me to have great advantages over any system of mere examinations. The student does not merely cram; the examination is but an incident in his course. He abides with his learning, takes in its influence in every mood, and at an impressionable age is imbued with the best thoughts of the greatest men under the guidance of teachers who have steeped their own minds in the same sacred springs. This goes to make a manly character as well as a strong and versatile intellect; and I am proud to observe how generally institutions connected with this Univerity have turned out

men of a type combining some of the best characteristics of the West and of the East.

The paucity of candidates for science-teaching and for degrees in science was noticed by our Chancellor last year The system of teaching is less organized, the teaching staff is less fully manned than in the older departments. There is some uncertainty, too, both as to the prospects of a degree and as to the prospects of fitting employment for the graduate. What the University as such could do it has, as you have heard, been doing. B.Scs. who have in qualifying for that degree passed in such a subject as Chemistry, Botany or Zoology are exempted from it in the examination in Medicine when they seek the degree of M.D. The degree of B.Sc. has been made a gateway to the profession of the law as well as of medicine and engineering. We hope that with these practical advantages attending it the science course will soon be followed by numbers proportionate at least to the means of teaching.

The questions are still sometimes put—and to the students and their friends they are of momentous importance—of what really is science-teaching, and what part it can play in the liberal education which is the proper object of a university. But when we say "liberal", a part, at any rate, of the right answer is suggested by the interrogation. A liberal education, as a great science-teacher has said, aims at "the making of men"; it is not to be "diverted into a process of manufacturing human tools wonderfully adroit in the exercise of some technical industry, but good for nothing else." It must equally in the sphere of science as of literature enlarge the mind, give it an organizing power and a philosophic habit by which each new acquirement is measured in relation to the whole, and made to take its place in a system. It must give a love of knowledge for its own sake, and the loftiness and independence of character which extensive knowledge should produce. But more especially a truly scientific culture furnishes the mind not only with a mastery of the main facts of outward nature and a readiness to conform to her laws and so turn them to human uses, but with a method of inquiry a mode of facing the facts of the universe which cannot be acquired in any other way so well. The science student duly disciplined takes all nature for his province. To his trained perceptions there is nothing common or unclean, no creature is unworthy of investigation by man which has been

deemed worthy of existence by God. He sees as others cannot see the prevalence of law amongst the infinite variety of phenomena, and evolution working to its ends in ordered harmony through millions of years. The mind thus trained is borne without an effort along the main current of progressive thought. It has a rich store of ideas in which to bathe each new problem in manifold lights; and as the various activities of the human mind are intimately connected, sciences repay to literature in its analysis the debt of inspiration by which its own infant energies were first awakened to consciousness and exercise.

I cannot justify these observations by their novelty. The same things have been said before and with all the requisite effect. The worth and dignity of scientific pursuits is not in itself any longer a subject of controversy. My purpose has been rather to call the attention of my younger hearers to the spirit in which those of them who are choosing a career based on science ought to prepare for it and to pursue it. It should not be looked on as a mere source of pelf. Their best energies should not be solely concentrated on what pays best. Gain and getting on are not to be disdained; the effort to win them calls forth in many men resources of energy and skill and patience which improve their moral being all through life; it brings men, too, into contact with actual, inexorable facts, and so adds effectively to their knowledge of the world in which they are placed and of their own relations to it. But what I wish to insist on is this, that no man of science should allow his pursuits and aims to descend to the level of mere unmitigated money-getting; still less, if possible, should he be satisfied with a rule-of-thumb performance of mere journey-work. In the practice of his profession, if he has one, he should preserve a habit of referring details to general principles and of testing principles by details. He should establish link after link of connexion between those ideas which lie at the basis of his own craft, or his own line of investigation, and the general mass and movement of human thought. Thus from technical accomplishment he may advance to a true philosophy of his subject, and add his contribution to the final adjustment of human thoughts and human life to the realities of things.

A contrast very dishonouring to science and to studies such as this University favours is sometimes drawn between

what is called the practical man and the theoretical man I trust none of our students will ever allow themselves to be drawn away by shallow criticism of this kind from an earnest pursuit of sound theory. It is this which must lie at the basis of all really competent practice. That eminent man of science, Sir W. Grove, has vigorously denounced the exaltation of the purely practical man as he is called. If there be one species of cant more detestable than another, it is that which eulogises what is called the *practical man* as contradistinguished from the *scientific*. If by practical man is meant one who, having a mind well stored with scientific and general information, has his knowledge chastened and his theoretic temerity subdued by varied experience, nothing can be better; but if, as is commonly meant by the phrase, a practical man means one whose knowledge is derived from habit or traditional system, such a man has no resource to meet unusual circumstances; such a man has no plasticity; he kills a man according to rule, and consoles himself, like Molière's doctor, by the reflection that 'a dead man is only a dead man, but that a deviation from received practice is an injury to the whole profession.' If a profession is to be advanced in usefulness, dignity and public appreciation, it must be nurtured by fresh and stimulating thought. Immobility is in these days a comparative retrogression, and the gentlemen who, after a training in science, betake themselves to one of the professional courses will, I trust, recognize and keep hold on the means of making their careers not only immediately useful, but a source of self-culture, of permanent improvement to science, and of blessing to mankind.

An obstacle of a serious kind to the adoption of a scientific course arises from the defective elementary teaching of the schools. The faculty of observation is hardly at all cultivated, and a student beginning to work at science in a college has still to master the rudimentary notions which ought to have been familiar to him from early childhood. Steps have lately been taken, I understand, to improve the means and appliances in the Government schools for teaching rudimentary mechanics, but the teachers themselves need teaching how to teach. They need still more a living interest in the facts of outward nature. Where this exists, the common incidents of every-day life can be made the basis of an humble, but really useful, scientific

teaching; the faculties can be trained to quick and accurate instead of hazy and defective perceptions; and reasoning on the right way of doing a great many familiar acts opens the way to an habitual estimation of forces and relations, an habitual reduction of new cases under known principles, which as far as it goes is a scientific turn of mind. Much, it is obvious, may be done, as much remains to be done, in this direction. The gathered inertia of centuries has to be overcome. But, now that a start has been made, I trust that Indian students will take a forward and honourable place in the ranks of scientific learners and even of original investigators. India presents in many ways an inviting field for scientific research in which home-born seekers after truth must have a great advantage over foreigners. Some men there are already amongst us who without the advantages—too slender as these are—which the Colleges now afford, have gained distinction in the field of natural science, and who in converse with nature enjoy a serenity of mind which is the chief element of happiness. If we turn our thoughts to such a man as our illustrious Darwin, or to many a one less eminent than he, we cannot but recognize that superiority to conventions and external circumstances which Lucretius has celebrated as the highest fruit of knowledge. This fruit is equally accessible to any student of those whom I see about me if he will but rise to the true level of his calling and follow his great masters not only in their assiduity of toil but in their moral elevation, and their ardent readiness to welcome and diffuse the truth.

Now, gentlemen of the younger generation, as I have dwelt so long on science as an instrument of culture, you would not readily forgive me if I enlarged still further on the special advantages of a literary training. The subject is an interesting one, and there are, as I think, many misconceptions about it which it would be worth while to investigate. I may perhaps find some occasion for laying my views on this topic before the University, but let it suffice for the present to point out with what admirable precision literature is taught; that its contents are the best products of the most gifted minds; that it is everywhere concerned with the acts and the emotions that are distinctively human; that it has largely formed the character of the society we have to join; and that of necessity it is greatly supplemented by the experience of ordinary

life. Here, surely, are the elements of a training which, mixed with active exercise in what is acquired, goes to form a real education, one in which high faculties are trained to high perfection, and the heart is enriched as well as the head. But literature is more than this. Some of you remember Macaulay's touching lines after his defeat at Edinburgh. The queen of learning and meditation visits her votary in a dream and tells him of all she will bestow which no envy of fortune and no folly of the crowd can take away. She was the comforter of Bacon in disgrace, of Clarendon in sickness, of Raleigh in his lonely cell. She

> "lighted Milton's darkness with the blaze
> "Of the bright ranks that guard the eternal throne."

To you, if you will be her disciples, she will be, as to him, a helpful friend, a faithful mistress, and a bounteous queen. Be not, however, like that would-be Christian of the early time who could not put away his wealth for his convictions. Our blessings have their price, and learning sheds her choicest boons only on him who offers the purest sacrifice. Sordid arts and the astuteness of low practice will in most cases serve your worldly purposes better; but seeking fortune in this fashion you make learning a mean drudge instead of an honoured companion, and her divinity perishes in a servile air. Reject base ways, and in good fortune or in bad she will pour treasures of joy or consolation into your lap. You may then truly—

> "with an unforced smile,
> "See riches, baubles, flatterers pass away"

—and having made your mastery of your calling secure beyond cavil, you may enjoy your slender gains in a companionship and with a spirit which any Crœsus might envy. Take your love for literature with you through life. There will be dark hours when you will need it, and, fortune favouring, there will be bright ones to which it alone can give the chastened lustre of dignity of thought, of taste, and of refinement.

Now, do not suppose, young graduates, that I have propounded any Utopian scheme or invited you to a task beyond human capacity. You are called on for no resignation, no submission to the higher powers, but what some good men and many gentle women practise every day. Nor am I an apostle of mere quietism. The certainty of resources and consolations in reserve ought indeed to give

you boldness and pertinacity in action. It is no part of the scheme of Providence that we should feebly bow to fate, whimpering at our ill luck instead of striving to conquer it. Your science, your literature should be a source, then, of energy as well as fortitude. They should enrich your action as well as your thought, and everywhere teach you the lesson of modest faith and perseverance. You must all have learned in your several lines of study the immense value of sustained and vivid attention. You must have come to appreciate the task which he undertakes who resolves to be even a faithful learner, much more a teacher of any important branch of human knowledge. You have found that clever as you were in the circle of your relatives, in the class of your school, or the quarter of your town, there were many other boys growing up at the same time at least as clever as yourselves and forming a crowd of competitors compared with the few places of fame and of emolument available as the meed of intellectual distinction. This, too, you must have learned, that toil and tenacity of purpose exercised in any field for which you are not unfitted by positive defects achieve in the long run far more than the desultory efforts even of a brilliant ability. Our Maker, as Burke says, has imposed nothing on us as a duty which it is beyond our capacity to do or to know. What is obligatory is feasible, and in the development of every science we find its leading principles reduced by degrees to simple propositions within the grasp of the ordinary intellect, as though to favour the greatest number with an increasing insight into the mysteries of matter and of mind. There is always something great attainable, yet always something as great in reserve. So the education of the human race is planned—the humblest in ability takes his share in it, and, as things are arranged, a sufficient share if he but modestly acknowledges his need and accepts a low place at the banquet to which all are invited. For some of you the words "Friend, come up higher" will in due time sound: be patient and await the summons. Have fortitude even to await it in vain. Your labours are not therefore thrown away. Knowledge and the sense of duty done bear in themselves their own reward; and you have in some sort reaped the fruits of others' toil dedicated for centuries to the glory of the Creator and the relief of man's estate. The teachers under whom you have studied have been the interpreters between the world and you of what

would else have been a mere confusion of tongues or a chaos of unrelated facts. You must have seen by what small accretions of knowledge the way has been prepared for the greatest triumphs of human genius. On you it devolves in turn to be the interpreters to your countrymen of the European learning and moral energy by which their national being may be renovated. On you it devolves to repay your debt to learning by adding some gain of observation or of thought to its expanding store. If you cannot discover you can verify; if you cannot originate "the thoughts that breathe and words that burn," you can illustrate them; you can enforce them; and in this Eastern land, the ancient nursery of Civilization, you can help to form the intellectual soil from which new growths of wisdom, happiness and beauty are to spring up in the time to come.

The Honourable the Vice-Chancellor, after a short pause, declared the Convocation dissolved.

Examination Papers.

1881-82.

B 1066—1 *ex*

Examination Papers.

[*A copy of the following Directions is laid on the Table of each Candidate at the beginning of each Examination.*]

1. Write your number on the list and your name, beginning with your surname, at the top of each sheet of foolscap.

2. Make a margin (as in this paper), and write in the margin, at the top of each page, the number of the answer.

3. Write upon one side only of the paper, and do not write any part of your answer upon the margin.

4. Begin each answer at the top of a new page.

5. Arrange your papers with care in the order of the question, *and tie them together* with the piece of string provided.

6 Write on the back of the last sheet—

1st. Your number on the List.

2nd. Your name, beginning with your Surname.

7 Candidates in want of anything are to apply to the Examiner or other officials in charge, but are not to leave their seats on this or any other account, except to deliver up their answers.

8. If any Candidate bring any book or paper into the Examination Hall, or speak to, or communicate in any other way with, another Candidate while the Paper Examination is going on, he will be instantly expelled, and his name reported to the Board of Examiners.

9. Candidates, when they have given up their answers, are on no account to return to their seats. They must at once leave the Hall without loitering.

PETER PETERSON, M.A.,
University Registrar

I.

MATRICULATION EXAMINATION, 1881-82.

EXAMINERS

The Rev J. M. HAMILTON, S.J. PETER PETERSON, M A. ... The Rev. A. C. GRIEVE W. LEE WARNER, M.A. ... J. ANDERSON, Esq. ... . J. OLIVER, Esq. . .. . The Rev. J. J. BAMBRIDGE	In English and History and Geography.
SHANKAR MORO RANADE, B A. ...	In Sanskrit.
The Rev. C. F. H. JOHNSTON, M.A. ..	In Latin.
JOSEPH EZEKIEL, Esq.	In Hebrew.
Khán Bahádur HOSHANG JAMASP DASTUR	In Persian.
The Rev. A. BOURQUIN	In French.
A P DE ANDRADE, G.G.M.C. . .	In Portuguese.
BAL MANGESH WAGLE, M.A., LL.B .	In Maráṭhi.
JAVERILAL UMIASHANKAR YAJNIK, Esq	In Gujaráti.
K. ANANDRAO, Esq.	In Canarese
RAHIMTULAH MUHAMMAD SAYANI, M.A , LL.B.	In Hindustáni.
ALUMAL TRIKAMDAS BHOJVANI, B.A.	In Sindhi
GOVIND VITHAL KURKARAY, B A. . Khán Bahádur BAMANJI SORABJI, L C E.	In Arithmetic & Algebra and Euclid.
The Rev. D MACKICHAN, M A., B D. The Rev. F. DRECKMANN, S.J . ..	In Natural Science.

MONDAY, 21ST NOVEMBER.

[10 A.M. TO 1 P.M.]

ENGLISH.

The Rev. J. HAMILTON. | W. LEE-WARNER, M.A.
P. PETERSON, M.A. | J. ANDERSON, Esq.
The Rev. A. C. GRIEVE. | J. OLIVER, Esq.

The Rev. J. J. BAMBRIDGE.

[The figures to the right indicate full marks.]

Ten marks are assigned to legibility and general neatness of writing. 10

1. Paraphrase— 35

'Tis done! dread winter spreads his latest glooms,
And reigns tremendous o'er the conquered year:
How dead the vegetable kingdom lies!
How dumb the tuneful! Horror wide extends
His desolate domain. Behold, fond man!
See here thy pictured life: pass some few years,
Thy flowering spring, thy summer's ardent strength,
Thy sober autumn fading into age,
And pale concluding winter comes at last
And shuts the scene. Ah whither fled
Those dreams of greatness? those unsolid hopes
Of happiness? those longings after fame?
Those restless cares? those busy bustling days?
Those gay-spent festive nights? those veering thoughts,
Lost between good and ill, that shared thy life?
All now are vanished! Virtue sole survives,
Immortal, never-failing friend of man,
His guide to happiness on high.

Or translate *one* of the following passages:—

एक कोल्हा एका खोपटींत शिरून कांहीं भक्षा-
वयास मिळवावें ह्मणून खालीं वर पहात होता. त्यानें
तेथें एक कोंबडी पाहिली; ती माळ्यावर उंच बसली
होती, तिजपाशीं त्यास जाववेना; तेव्हां तो तिची
प्रशंसा करून ह्मणतो, ताई, तुझा कायगे समाचार
आहे? तुला फार बरें वाटत नाहीं, घरांतच निजून

असतेस, असें मीं ऐकिलें, तेव्हांपासून, ताई, मी तुला खरेंच सांगतो, मला असे दुःख झाले आहे कीं रात्रदिवस झोंप लागत नाहीं. तर, गडे, खरेच सांग मला, तूं आतां कशीगे आहेस ? अरती तरी ये, मला तुझी नाडी पाहूं दे; असा तो बोलतो आहे, मध्यें मध्ये तिला नांवाजतो आहे असे पाहून कोंबडी त्यास बसल्या जाग्यावरूनच उत्तर करिते, खरेंचरे, भाऊ, त्वां ऐकिलें तें खरेंच; असे दुखणें मला कधींही आलें नव्हतें. मी आतां खालीं तुजकडे आलें असते पण वैद्यानें मला सांगितले आहे कीं तूं कोणास जवळ येऊं देऊं नको, आणि कोणाजवळ जाऊं नको; ह्मणून रे, भाऊ, मला खालीं येववत नाहीं. आतां तूं ह्या वेळेस जा; सध्यां मी इतकी अशक्त आहें कीं तुझ्या जवळ चालून आलें असतां माझा प्राण निघून जाईल.

એક દહાડો કુમારપાળ રાજા પાલખીમાં બેશીને ચૌટામાંથી જતા હતા ત્યારે તેને હેમાચાર્યનો શિષ્ય મળ્યો. તેને તેણે પુછ્યું કે આજે શી તિથિ છે ? તે દહાડો ખરેખરી અમાસ હતી, પણ શિષ્યથી ભુલથી કહેવાઇ ગયું કે મહારાજ, આજે પુનેમ છે. તે વખતે કેટલાએક બ્રાહ્મણો તે રસ્તે થઇને જતા હતા તેમણે એ જવાબ સાંભળ્યો, અને ખડખડ હસી પડી તે શિષ્યની મશ્કરી કરી બોલ્યા કે આ બોડકો શુ જાણે ? આજે તો અમાવાસ્યા છે. કુમારપાળે આ વાત સાંભળીને

ઘેર જઇને હેમાચાર્યને બોલાવ્યા. પેલો શિષ્ય તેના અપાશરામાં જઇ પહોંચ્યો ત્યારે તે ઘણો શરમાયો, અને ખેદ પામ્યો. આચાર્યે તેને પુછ્યુ કે શું થયુ છે? તે ઉપરથી તેણે તેની આગળ સઘળી વાત કહી. ત્યારે આચાર્યે તેને કહ્યું કે એ વાતમાં તારે કાંઇ ચિંતા રાખવી નહીં. રાજાના માણસો સાથે તે મેહેલમાં ગયો. કુમારપાળે પુછ્યું કે આજ શી તિથિ છે? ત્યારે બ્રાહ્મણોએ કહ્યું કે અમાવાસ્યા; પણ હેમાચાર્યે કહ્યું કે પૂર્ણિમા. બ્રાહ્મણે કહ્યું કે રાત્રે જણાશે. જો પુનેમ હશે તો પૂર્ણ ચંદ્ર દેખાશે; ત્યારે સઘળા બ્રાહ્મણોએ રાજ છોડી જતા રહેવું પણ જો ચંદ્ર ન ઉગે તો જતીઓને દેશનિકાલ કરવા. હેમાચાર્યે એ વાત કબુલ કીધી અને પોતાને અપાશરે ગયો. તેને એક દેવીનું સાધન હતું તેની તેણે આરાધના કીધી અને તે દેવીની યુક્તિથી સઘળાની નજર બંધાઇ તેથી પૂર્વમાં ચંદ્ર ખરેખરો ઉગ્યો છે એમ સઘળાએ દીઠું. બ્રાહ્મણો હાર્યા અને તેઓને દેશનિકાલ કરવાનો હુકમ કરયો. જતીએ આ વાત કહી એટલે એક બ્રાહ્મણ બોલ્યો કે જ્યારે પૂર્વાર્ધ કહ્યા ત્યારે ઉત્તરાર્ધ શા માટે કહેતા નથી? જો તમારી કહેવાની ખુશી ન હોય તો સઘળા સભાસદોને હું કહી સંભળાવું. તે વખતે દેવબોધી આચાર્યને પાટણમાં બ્રાહ્મણો બોલાવી લાવ્યા. સવારે કુમારપાળ રાજાએ બ્રાહ્મણોને બોલાવી મંગાવ્યા, અને રાજની બહાર જવાનો હુકમ કીધો. તે વખતે દેવબોધિ આચાર્ય આગળ પડીને બોલ્યા કે કોઇને રાજ બહાર કાઢી મુકવાની શી જરૂર છે? આજે નવ કલાકે

મહાસાગર પોતાની મર્યાદા છોડીને આખા દેશઉપર ફરી વળશે. એ સાંભળીને રાજાએ હેમાચાર્યને બોલાવ્યા, અને પુછ્યું કે બ્રહ્મચારી કહેછે કે જગપ્રળય થનાર છે તે ખરૂ છે કે નહીં? હેમાચાર્યે કહ્યુ કે જગપ્રળય કદી થનાર નથી.

ಅವಳು ಆ ಹುಡುಗನನ್ನು ಒಂದು ಬುಟ್ಟಿಯೊಳಗೆ ಮಲಗಿಸಿ, ಮೇಲೆ ಕೆಲವು ಯಲೆಗಳನ್ನು ಫಲಗಳನ್ನು ಹೆರವಿ, ಆ ಬುಟ್ಟಿಯನ್ನು ನಾವಲಿಗನ ತಲೆಯ ಮೇಲೆ ಕೊಟ್ಟು ಅವನಿಗೆ, ನೀನು ಇದನ್ನು ತೆಗದು ಕೊಂಡು ಪಟ್ಟಣದ ಹೊರಗೆ ನದಿಯ ಥಡಕ್ಕೆ ಹೋಗಿ ಕೂಡ್ರು, ನಾನು ಬೇಗನೇ ನಿನ್ನನ್ನು ಹಿಂಬಾಲಿಸುವೆನು, ಯಂದು ಹೇಳಿದಳು. ಮತ್ತು ದಾರಿಯಲ್ಲಿ ಯಾರಾದರೂ ಕೇಳಿದರೆ ಹಣ್ಣುಗಳನ್ನು ತೆಗದು ಕೊಂಡು ಹೋಗುತ್ತೇನೆಂದು ಹೇಳೆಂದಳು. ಆ ಮೇರೆಗೆ ಅವನು ಆ ಬುಟ್ಟಿಯನ್ನು ಒಯ್ಯಲು, ಪನ್ನೆಯು ತನ್ನ ಸ್ವಂತ ಮಗನನ್ನು ರಾಜಕುಮಾರನ ಹಾಸಿಕೆಯ ಮೇಲೆ ಮಲಗಿಸಿ ತಾನು ಹತ್ತರ ಕೂತು ಕೊಂಡಳು. ಅಷ್ಟರಲ್ಲಿ ಅರಸನನ್ನು ಕೊಂದ ಬನ್ನಬೀರನು ತಾನೇ ಕೈಯೊಳಗೆ ಬಿಚ್ಚುಗತ್ತಿಯನ್ನು ಹಿಡಿದು ಕೊಂಡು ಬಂದು ರಾಜಮಂತ್ರನೆಲ್ಲಿ? ಯಂದು ಆ ಒಕ್ಕಲಗತ್ತಿಯನ್ನು ಕೇಳಿದನು. ಆಗ ಅವಳು ಏನೆಂದು ಹೇಳತಕ್ಕದ್ದು? ಒಳ್ಳೆದೇ ಅವಳ ಬಾಯಿಯಿಂದ ಶಬ್ದ ಹೊರಡಲಿಲ್ಲ. ತನ್ನ ನಿಜವಾದ ಹೆತ್ತ ಕೂಸಿಗೆ ಮೋಸ ಬಂತೆಂದು ತಿಳಿದ ಮೇಲೆ ಅವಳ ಮುಖದಿಂದ ಅಕ್ಷರ ಹೊರಡುವದು ಹ್ಯಾಗೆ? ಆದಾಗ್ಯೂ ಸ್ವಾಮಿಚಕ್ತಿಯನ್ನು ಬಿಡಲಾರದೆ ಆ ಸತ್ಯಪ್ರಮಾಣ ಉಳ್ಳ ಸೇವಕಳು ಮಂಚದೆಡೆ ಬೊಟ್ಟು ತೋರಿಸಿದಳು.

O movimento de suas tropas na batalha é regulado por varios sons e ruido das armas, dirigidos pelo capitão-general, e que, quando ouvidos no meio da batalha, dão de entender se as tropas

devem atacar, ou retirar-se, hir adiante, ou rodear pela esquerda ou dereita, ou qualquer outro movimento militar. Por esses sons as ordens do general se conhecem distinctamente, do mesmo modo como são comnosco o tambor e a trombeta. Tem elles tres principaes sons na guerra : um que procede de grandes timbales, cujas caixas são feitas d'um unico bocado de páo, e cobertas de couro, que batem com pequenas cacheiras de marfim ; outro provém d'um instrumento que tem a forma de uma pyramide virada, de modo que a sua extremidade aguda fica por baixo, e a larga por cima. Este instrumento tem chapas delgadas de ferro, ôcas no seu interior, e é como um sino virado. Ellas se batem com varas de páo, o que faz-se incessantemente para produzir um estrondo o mais rouco e guerreiro que é possivel, as vezes mesmo rachando-as para se augmentarem os seus horriveis sons. O terceiro instrumento é feito de dentes elephantinos, tanto grandes como pequenos, que, como são ôcos, assopram por um buraco no seu lado como uma frauta, e não pelo cimo, e tem uma forma tal que soam como uma cornêta, produzindo um som militar e agradavel, e um que inspira coragem nos soldados. Estes tres instrumentos guerreiros sãm ora grandes ora pequenos : os grandes sãm levados juntos com o capitão-general, de modo que ella possa dar o sinal a todo o exercito, sendo os pequenos levados pelos differentes corpos de batalha, e por cada capitão da tropa, e tocando os tambores com suas maos. De modo que ouvindoos timbales, ou a cornêta, ou o terceiro instrumento, todo o exercito responde com os seus instrumentos, para mostrar que os sinaes foram percebidos, fazendo o mesmo os officiaes inferiores. E não somente eram esses sinaes usados em geral, mas tambem no acto do combate ; pois, durante a peleja, hiam com esses instrumentos diante dos soldados, homens bravos dançando e tocando os tambores para animal-os, acautelando ao mesmo tempo de qualquer perigo que ameaçasse por varios sons.

شہرزاد نے کہا بادشاہ سلامت اگلے
زمانے میں ایک سوداگر تھا بہت صاحب
دولت نقد اور اسباب تجارت کا بے شمار
رکھتا تھا ہر چند نویسندے کوٹھیاں غلام
اور گماشتے جابجا مقرر تھے مگر آپ بھی
گاہ بیگاہ واسطے تجارت کے سفر کیا کرتا

ایکبار اوسکو واسطے کسي مہم کے سفر درپیش
ہوا تن تنہا گھوڑے پر سوار ہوکر چلا اور
جہان اوسکا ارادہ جانے کا تھا کوئی چیز
کھاني کي قسم سے وہان کم میسر ہوتي تھي
اسواسطے ایک خرجي مین کچھہ کلچے اور
چھہارے بھر لئے پھر وہان پہونچکر بعد
سرانجام کام کے مراجعت کي چوتھا روز
تھا کہ اوسنے ایک روز بسبب تمازت آفتاب
کے راہ اپني چھوڑکر چاہا کہ کسي درخت
کے سائے مین ٹھہرے اور دم لے دور سے
دیکھا کہ ایک چشمہ صاف نیچے درخت چار
مغز کے جاري ہي وہان پر وہ گھوڑے سے
اوترا اور اوسکو درخت سے باندھہ کنارے
چشمہ کے بیٹھگیا اور کلچے چھہارے
تھیلی سے نکالکر کھانے لگا جب کھا چکا او
خوب سیر ہوا تب گٹھلیان چھہارے کي
ادھر اودھر پھینک دین پھر بعد فراغت
طعام وضو کرکے بطرز اسلام نماز پڑھنے لگا
جب نماز پڑھہ چکا دو زانو بیٹھکے دعا

مانگنا شروع کیا ناگاہ ایک جن کو دیکھا کہ
اسکي بڑي عمر تھي اور قد مانند دیو کے
تھا ننگي تلوار ہاتھہ مین لئے ہوئے اسکي
طرف جھپٹ کر آیا ارو نہایت غصے سے للکار
کے کہا ادھر آ کہ تجکو گردن مارون سوداگر
غریب شکل مہیب اور سخنان حیبت ناک
سے ڈرا اور کانپ کر اوس جن سے کہا
خداوند مینے آپکا کیا گناہ کیا ہي کہ جسکے
عوض مجھے جانسے مارتے ہو جن نے کہا
تونے میرے فرزند کو قتل کیۂ ہي اسکے
قصاص مین تجکو مارتا ہون سوداگر نے
کہا کیونکر تمھارے بیٹے کو مارا مینے تو
اسکو دیکھا بھي نہین جن نے کہا کیا تو نہین
یہان اپني راہ چھوڑکر بیٹھا اپني جھولي
سے خرمے نکالکر کھائے اوراسکي گٹھلیان چارون
طرف نہین پھینکین سوداگر نے کہا کہ یہ سب
سچ ہي مین ان باتون سے انکار نہین کرتا
جن نے کہا جب گٹھلیان چھارے کي تو
چارون طرف پھینکنا تھا ایک گٹھلي میرے

بیٹے کي آنکھہ مین اس زور سے لگي کہ
وہ فوراً مرگیا اب تجھے اوسکے عوض قتل
کرتا ہون

2. In a letter of about 40 lines describe some of your games or other amusements. 35

3. Explain the following :— 8

(a) To stare one out of countenance.

(b) We must take men as we find them.

(c) The mind never unbends itself so agreeably as in the conversation of a well-chosen friend.

(d) For these reasons he shines in a mixed company, where he has the discretion not to go out of his depth, and has often a certain way of making his real ignorance a seeming one.

4. (a) Show the etymological connection between the following pairs of words, and trace, so far as you can, the growth of the meaning of each word :—sure, secure ; blaspheme, blame ; faction, fashion ; fealty, fidelity ; tradition, treason ; ration, reason. 12

(b) Give the derivation and primary sense of the following words :—defiance, worship, jovial, heaven, handsome, pagan, demure.

(c) How do you account for the fact that the English words *mother* and *father* bear so close a resemblance to the Latin words of the same meaning *mater* and *pater* and the Sanskrit *matar* and *pitar*. What connection is there between the two English words *motherly* and *maternal ?*

5. Give the rules for the formation of plurals in English. Give a few of the chief exceptions. How did the plural in *s* gain the ascendancy ? 5

6. Parse the words in italics— 16

(a) They were offered *their lives* by the conquerors.

(b) He is *a trifle* taller than I.

(c) He is *no* happier for all his wealth.

(d) Who was *it* that you saw ?

(*e*) A short *distance* from the town was a small stream.

(*f*) Better *wait* a little.

(*g*) How came you *to be left*.

(*h*) *Talking* of books here is a very rare book.

7. Show by a series of short sentences, or in any other convenient way, how the words in (*a*) and (*b*) differ from one another in meaning— 10

(*a*) Genius, reason, capacity, prudence.

(*b*) Pride, arrogance, vanity, conceit.

8 What figures of speech are employed in the following passages :— 10

(*a*) Our castle's strength will laugh a siege to scorn.

(*b*) So frowned the mighty combatants, that Hell
Grew darker at their frown.

(*c*) The law of God is a light to the feet and a lamp to the path.

(*d*) He buys, he sells, he steals, he kills for gold.

(*e*) For the rain it raineth every day.

9. Analyse according to the subjoined form— 9

Sentence.	Kind of Sentence.	Subject.	Predicate.	Completion.	Extension.

"Our royal navy has ever been the chief source of our country's security and glory; it is our ancient strength, as being naturally suited to our insular position, the floating bulwark of our coasts; a force whose magnitude and might, however great, can never be supposed to render it unsafe for the interests of our national freedom; and, accordingly, this means of defence has been much fostered and promoted from the earliest periods of our history."

MONDAY, 21ST NOVEMBER.

[2 P.M. TO 4 P.M.]

HISTORY AND GEOGRAPHY.

The Rev. J. HAMILTON.
P. PETERSON, M.A.
The Rev. A. C. GRIEVE.
W. LEE-WARNER, M.A.
J. ANDERSON, Esq.
J. OLIVER, Esq.
The Rev. J. J. BAMBRIDGE.

[The figures to the right indicate full marks.]

1. What was the effect upon the nation of the wars of Edward III.? 4

2 What led to the 'Petition of Right' and the 'Bill of Rights'? Give the chief provisions of each. 8

3. On what grounds was James II accused of violating the constitution? 4

4. Give a detailed account of *one* of the following battles :— 4

Agincourt, Edgehill, Marston Moor, Worcester, Sedgemoor.

5. Mention the most important provisions of the Act of Union (1) between England and Scotland, and (2) between Great Britain and Ireland. 8

6. Who were the following persons? Mention when and where they flourished, and the most important facts connected with them :—Sivají, Bairám Khán, Ranjit Singh, Sir William Macnaghten, Sir Eyre Coote, Lord William Russell, Charles Fox. 10

7 When were the following battles fought? Between whom were they fought, and who were the victors? *Mudki, Plassey, Miani, Baxar, Ghazni, Firuzhahr, Porto Novo.* 7

8 Describe exactly the position of the following places, and state for what events they are famous :—St. Albans, Runnymede, Tewkesbury, Rochelle, Zutphen, Fontenoy, Lexington, Bosworth, Utrecht, Vittoria, Bhartpur, Yendabu. 12

9 Define the following geographical terms :—

Volcano, watershed, tributary, steppes, iceberg, antipodes, simoon, seaboard, trade winds, parallel of latitude

10. State what you know of the causes of earthquakes, dew, clouds, rain, glaciers, winds 8

TUESDAY, 22ND NOVEMBER.

[10 A.M. TO 1 P.M.]

SANSKRIT.

SHANKAR MORO RANADE, B.A.

[The figures to the right indicate full marks.]

1. Combine according to the rules of Sandhi, mentioning the particular rules applicable to the expressions underlined. 8

(a) अमाविष्णू अमू इज्येते अस्यां इष्टौ. *(b)* आगच्छ भोः ऋषिदारक. *(c)* ते एव एते असुराः उपायनहराः *(d)* पितः रक्ष *(e)* कर्तृ उत. *(f)* प्र एजते *(g)* मधुलिह्संततिः अस्मिन् चन्दनपादपे अस्ति.

2. Give the nom. *fem.* and *neu.* of उपेयिवस्, जग्मिवस् and जगन्वस्; also the acc. and instr. of अन्वच् (*m.* and *n.*), अनडुह्, मूर्धन् and गो. 7

3. Decline पति, सेनापति and चतुर *f*; and give the acc. (*m.* and *n.*) and the *fem.* forms of दिशत्, भवत् ददत्, यात् and युञ्जत्. 10

4. Explain what you understand by the terms वृद्धि, संप्रसारण, सेट्, अनिट् and अभ्यास. 5

5. Write down the forms of the 3rd pers. of the perf. of वन्, भ्रम्, तॄ, स्तॄ and इष्; and the 3rd pers. aorist and 2nd pers. future of यम्, स्पृश्, वस् and प्रच्छ. 10

6. Give the 3rd pers. sing. present of the *pass.* and of the *desid.* of दा, ग्रह्, कॄ, दिव् and भिद्. 10

7. Translate into English :— 20

(a) सखे प्रतिपालय मामहमपि भवन्तमनुयास्यामि न शक्नोमि भवता विना क्षणमप्यवस्थातुमेकाकी कथमपरिचित इवादृष्टपूर्व इवाद्य मामेकपद उत्सृज्य प्रयासि कुतस्तवेयमतिनिष्ठुरता कथय त्वदृते क्व गच्छामि कं याचे कं शरणमुपैम्यन्धोस्मि संवृत्तः शून्या मे दिशो जाता निरर्थकं जीवितं केन सह परिभ्रमामि कमालपाम्युत्तिष्ठ देहि मे प्रतिवचनम् ।

(b) किं प्राभविष्यदरुणस्तमसां विभेत्ता
तं चेत्सहस्रकिरणो धुरि नाकरिष्यत् ।

8. Name and dissolve the various compounds in the following :— 10

अनियतरुदितस्मितंविराज-
त्कतिपयकोमलदन्तकुड्मलाग्रम् ।
वदनकमलकंशिशोःस्मरामि
स्खलदसमञ्जसमञ्जुजल्पितंते ॥

9. Translate into Sanskrit— 20

(a) At that time, ninety-nine were examined, of whom fifty-four were found to be good grammarians.

(b) Did you milk the cows ?

(c) Brahmanas repeating the Vedas are like frogs (वर्षाभू). croaking in the rains.

(d) He has pounded the medicine, emptied the vessel, put that powder into it, poured water, and placed it on the fire. *(Aor. forms to be used.)*

(e) Leave me awhile to meditate alone,
That here, in still communion with myself
And cool abstraction from all other objects,
I may devote my mind entire to you.

TUESDAY, 22ND NOVEMBER.

[10 A.M. TO 1 P.M.]

LATIN.

The Rev. C. F. H. JOHNSTON, M.A.

[The figures to the right indicate full marks.]

1. Give the feminine forms of puer, magister, caper, monitor, leo, rex, gallus, Phoenix. 2

2. Give the genitive and dative cases plural of deus, puer, ambo, caput, imber, comes, ŏs, pars, ŏs. 3

3. Give the perfect tense and supine of juvare, vetare, pendēre, sedere, parēre, parĕre, pendĕre, verrere, urere. 3

4. What are the various meanings of the ablative case? 6

5. Explain the construction of the cases or moods in italics— 18

(*a*) Achaei quoque *auxilia Philippum* regem orabant.

(*b*) Ubii orabant ut Cæsar *exercitum* modo *Rhenum* transportaret.

(*c*) Nemo credit, nisi *ei, quem fidelem putat.*

(*d*) *Cui bono* fuit?

(*e*) Deus animum circumdedit *corpore.*

(*f*) Vix audior *ulli.*

(*g*) *Vitio mihi* dant, quod mortem hominis necessarii graviter *fero.*

(*h*) Cato, quoad *vixit,* virtutum laude crevit.

(*i*) Minucius praefectus *annonae,* quoad res *posceret,* in incertum creatus.

6. Translate into English— 32

Depopulata Gallia Cimbri magnaque illata calamitate finibus quidem nostris aliquando excesserunt atque alias terras petierunt; iura, leges, agros, libertatem nobis reliquerunt. Romani vero quid petunt aliud aut quid volunt, nisi invidia adducti, quos fama nobiles potentesque bello cognoverunt, horum in agris civitatibusque considere atque his aeternam iniungere servitutem? Neque enim ulla alia condicione bella gesserunt. Quod si ea, quae in longinquis nationibus geruntur, ignoratis, respicite finitimam Galliam, quae in provinciam redacta, iure et legibus commutatis securibus subiecta perpetua premitur servitute.

7. Translate into Latin prose— 36

We cannot forget that every nation now existing in Europe became a nation through war. Britain was a part of the Roman Empire, a civilized province of that empire; growing in luxuries. It rebelled frequently against its masters; it was fertile, the saying is, in tyrants. It was not free therefore from petty wars by sea or land. But it was no nation. By battles severe and bloody the Saxons established their supremacy here. It seemed to the old inhabitants mere destruction, yet it was the commencement of a new life in our island.

TUESDAY 22ND NOVEMBER.

[10 A.M. TO 1 P.M.]

HEBREW.

JOSEPH EZEKIEL, ESQ.

[The figures to the right indicate full marks.]

1. (*a*) When do the letters אהוי become silent? 5

   (*b*) What letters of the Hebrew alphabet are interchanged for one another? Give some instances where you find these changes.

2. (*a*) Give the dual and plural of the word עַיִן with their significations. 6

   (*b*) Give some masculine and feminine nouns that take both a masculine and a feminine termination in the plural.

   (*c*) Distinguish the genders of קֶשֶׁת, דֶּרֶךְ, אֵשׁ, רוּחַ, בָּקָר, עוֹף, הָמוֹן, אֲנִי, גַּן, שֶׁמֶשׁ :

3. (*a*) What are the interrogative pronouns? How are they used? Give an example of each. 5

   (*b*) Give the masculine and feminine forms of the reciprocal pronouns.

4. (*a*) What are the prefixes and affixes that express the numbers, genders and persons of verbs in the indicative and imperative moods? 8

(*b*) Give the technical words formed by the letters used in these prefixes and affixes.

5. State all the peculiarities of the Niphal conjugation of a regular verb. 5

6. (*a*) Give the third person singular masculine of the past and future indicative of all the conjugations of the verb נָגַשׁ *he drew near.* 6

(*b*) When is a singular verb used with a noun in the plural? Give an example

7. Give some adverbs and prepositions that take the affixes of the possessive pronouns. 4

Give words that express the following prepositions :—

Before, under, from, with, near, against, on account of.

8. Parse the following sentence :— 10

וַיִּשְׁלַח שָׁאוּל אֶל יִשַׁי לֵאמֹר יַעֲמָד נָא דָוִד לְפָנַי כִּי מָצָא חֵן בְּעֵינָי :

9 Translate the following passage into Hebrew :— 30

And Jacob went near unto Isaac his father; and he felt him, and said, the voice is Jacob's voice, but the hands are the hands of Esau. And he discerned him not, because his hands were hairy as his brother Esau's hands: so he blessed him. And he said, art thou my very son Esau? And he said, I am. And he said, bring it near to me, and I will eat of my son's venison, that my soul may bless him. And he brought it near to him, and he did eat: and he brought him wine and he drank. And his father Isaac said unto him, come near now, and kiss me, my son. And he came near and kissed him: and he smelled the smell of his raiment and blessed him, and said, see the smell of my son is as the smell of a field which the Lord hath blessed.

10. Translate the following passage into English :— 20

הָלוֹךְ הָלְכוּ הָעֵצִים לִמְשֹׁחַ עֲלֵיהֶם מֶלֶךְ וַיֹּאמְרוּ לַזַּיִת מָלְכָה עָלֵינוּ : וַיֹּאמֶר לָהֶם

הַזֹּאת הֶחֱדַלְתִּי אֶת דִּשְׁנִי אֲשֶׁר בִּי יְכַבְּדוּ אֱלֹהִים וַאֲנָשִׁים. וְהָלַכְתִּי לָנוּעַ עַל הָעִצִּים: וַיֹּאמְרוּ הָעֵצִים לַתְּאֵנָה לְכִי אַתְּ מָלְכִי עָלֵינוּ: וַתֹּאמֶר לָהֶם הַתְּאֵנָה הֶחֱדַלְתִּי אֶת מָתְקִי וְאֶת תְּנוּבָתִי הַטּוֹבָה וְהָלַכְתִּי לָנוּעַ עַל הָעֵצִים: וַיֹּאמְרוּ הָעֵצִים לַגֶּפֶן לְכִי אַתְּ מָלְכִי עָלֵינוּ: וַתֹּאמֶר לָהֶם הַגֶּפֶן הֶחֱדַלְתִּי אֶת תִּירוֹשִׁי הַמְּשַׂמֵּחַ אֱלֹהִים וַאֲנָשִׁים וְהָלַכְתִּי לָנוּעַ עַל הָעֵצִים: וַיֹּאמְרוּ כָל הָעֵצִים אֶל הָאָטָד לֵךְ אַתָּה מְלָךְ עָלֵינוּ: וַיֹּאמֶר הָאָטָד אֶל הָעֵצִים אִם בֶּאֱמֶת אַתֶּם מֹשְׁחִים אֹתִי לְמֶלֶךְ עֲלֵיכֶם בֹּאוּ חֲסוּ בְּצִלִּי וְאִם אַיִן תֵּצֵא אֵשׁ מִן הָאָטָד וְתֹאכַל אֶת אַרְזֵי הַלְּבָנוֹן:

TUESDAY, 22ND NOVEMBER.

[10 A.M. TO 1 P.M.]

PERSIAN.

Khán Báhádur HOSHANG JAMASP DASTUR.

[The figures to the right indicate full marks.]

1. Translate into Persian— 25

A family kept together by patience.

It is recorded that an Emperor of China, once making a progress through his dominions, was accidentally entertained in a house in which the master, with his wives, children, daughters-in-law, grand-children, and servants, all lived together in perfect peace and harmony. The Emperor, struck with admiration at the spectacle, requested the head of the family to inform him what means he employed to

preserve quiet among such a number and variety of persons. The old man, taking out a pencil, wrote down—*patience, patience, patience!*

2. Translate into English— 23

خلیفه بغداد بواسطه عمارت خود ستونی
از چوب طلب نمود بغایت بلند اگرچه
بهم میرسید اَمّاراست نمی آمد باطراف
و جوانب پروانه ها نوشتند که در هر موضع
که یافت شود بیارند بعداز تفحص بسیار و
تجسس بیشمار در موضعی بهم رسید وچون
آنرا نزدیک شهر بغداد آوردند خلیفه باجمع
کثیری باستقبال آن ستون چوبی رفت
قضارا بهلول دانا نیزبدان مقام گذر نمود
و آن جمع را شگافته خود را پیش آن
چوب رسانیده لحظه سر گوشی نمود خلیفه
از روی تعجب پرسید که چه گفتی و چه
شنیدی ؟ بهلول جواب داد که از وی
پرسیدم که چوبی بیش نیستی باعث انیقدر
اعزاز و احترام تو چیست ؟ که خلیفه دوران
خود سوار شده باستقبال تو آمده چوب
مرا جواب داد که راستی من باعث این
قدر و منزلت من شده

3. Define ماضی شرطیه and ماضی متمنی. How are they formed? Give the ماضی متمنی (1st pers. sing.) of شتافتن and the ماضی شرطیه (2nd pers. pl.) of گسیختن with their English meanings. 10

4. (*a*) How do you form the مضارع of an infinitive? Give the مضارع of the following, with their English meanings:— 13

کاستن — کافتن — پرداختن — رستن — افراشتن and سودن

(*b*) Give the imperative forms of خستن — آغشتن and آختن

5. Give examples of شین مصدری — تای مفعولی — یای متکلم — یای لیاقت — کاف استفهام نفی — and یای فاعل with their meanings. 13

6. Define اسم ضمیر مشترک and اسم استفهام giving examples. 6

7. Give the Persian grammatical terms for *positive*, *comparative* and *superlative* (degree). 10

TUESDAY, 22ND NOVEMBER.

[10 A.M. TO 1 P.M.]

FRENCH.

The Rev. A. BOURQUIN.

[The figures to the right indicate full marks.]

1. Translate into English— 14

Un mourant, qui comptait plus de cent ans de vie,
Se *plaignait* à la Mort *que* précipitamment

Elle le *contraignît* de partir *tout à l'heure*,
Sans qu'il eût *fait* son testament,
Sans l'avertir au moins. "Est-il juste qu'on meure
Aussi vite? *dit*-il; attendez quelque peu,
Ma femme ne *veut* pas que je parte sans elle;
Il me reste à pourvoir un *arrière-neveu*;
Souffrez qu'à mon logis j'ajoute encore une aile!"

2. Parse all those words, and conjugate those verbs of the above passage which are in italics, but only in the tense in which they stand. 13

3. Translate intoFrench— 12

He possesses twenty-one houses.
Eighty men will not be sufficient.
He gave me eighty-one rupees.
There are hundred and thirty-one apples in that basket.
I bought three hundred pens and a thousand pencils.
There are ten thousand inhabitants in that town.
Who is it that knocks at the door?
It is I who did it.
A tea-cup. A cup of tea.
I have seen five cows grazing in the fields.
The cows which I have seen are splendid.
I have seen only two of them.

4. Translate into English— 8

Deux mois de plus feront mon affaire.
Otez-en, car il y en a quatre de trop.
J'étais à peine arrivé qu'il parût.
Je le fis partir sur le champ.
S'il a mille écus, c'est le bout du monde.
Il y a lieu de se fâcher tout de bon.
Il a failli se noyer.
Allons-nous en d'ici.

5. What is the general rule for the formation of the plural of French nouns? State the four principal classes of exceptions. 6

6. How do gender and number of nouns influence the adjectives by which they are qualified? Give examples. 4

7. What difference does the position of certain adjectives *before* or *after* the noun they qualify, make in their meaning? Give examples. 4

8. (*a*) When is in a relative sentence *qui* and when *que* to be used? 2

(*b*) Render into French the following pronouns:— 4

Mine, ours, theirs, each other, both, none.

9. Translate into English— 16

Louis XV. que le duc entretenait souvent de ses amusements voulut les connaître par lui-même. Il so fit montrer ses plantations et raconter l'histoire et les propriétés de chaque plante. Etonné de voir que les plaisirs qui instruisent valent au moins les plaisirs qui ne font que fatiguer, il voulut avoir un jardin botanique, en fit établir un avec beaucoup de magnificence et en donna l'intendance au jeune botaniste Lemonnier qui déjà alors commençait à se distinguer. Il lui donna bientôt des marques d'une affection qui se changea en véritable faveur, lorsqu'il le connût mieux. Lemonnier cependant ne se servit jamais de la faveur du Roi, ni de son propre crédit, que pour faire envoyer dans toutes les parties du monde des voyageurs éclairés, chargés d'en rapporter des plantes.

10. Translate into French— 17

While the continent of Europe yielded without resistance to the barbarians, the British island alone and unaided maintained a long and vigorous struggle against the formidable pirates, who, almost at the same instant, assaulted the northern, the eastern and the southern coasts. The cities, which had been fortified with skill, were defended with resolution; the natural advantages of the ground were improved by the inhabitants; the conquest of each district was purchased with blood; and the numerous defeats of the Saxons are attested by the silence of their own annalist.

TUESDAY, 22ND NOVEMBER.

[10 A.M. TO 1 P.M.]

PORTUGUESE.

A. P. DEANDRADE, G.G.M.C.

[The figures to the right indicate full marks.]

1. Translate into English :— 16

E' a guerra aquelle monstro que se sustenta das fazendas, do sangue, das vidas, e, quanto mais come e consome, tanto menos se farta. E' a guerra aquella tempestade terrestre que leva os campos, as casas, as villas, os castellos, as cidades, e talvez em um momento sorve os reinos e monarchias inteiras. E' a guerra aquella calamidade composta de todas as calamidades, em que não ha mal algum que ou se não padeça ou se não tema; nem bem que seja proprio e seguro. O pae não tem seguro o filho, o rico não tem segura a fazenda, o pobre

não tem seguro o seu suor, o nobre não tem segura a honra, o ecclesiastico não tem segura a immunidade, o religioso não tem segura a sua cella, ate Deus nos templos e nos sacrarios não está seguro.

2. What do you mean by *partes da oração variaveis* and *invariaveis?* Define and distinguish *palavras primitivas* and *derivadas*, giving one or more examples of each. 8

3. Decline fully the pronoun *Eu*, both in the singular and plural number. 8

4. Explique a differença entre o *pronome pessoal* e *relativo;* e dê um exemplo de cada um delles. 6

5. Que se entende por verbo *activo, passivo, neutro, pronominal*, e *impessoal?* Dê um exemplo de cada um destes verbos. 8

6. Quaes são os graus de comparação, e como elles se formam? Dê os comparativos e superlativos de—*Bom, Máu, Livre, Fiel, Pequeno, Frio, Misero, Magnifico, Salubre, Benefico, Alto, Baixo, Interno, e Externo.* 8

7. Conjugue o preterito perfeito do modo indicativo, e futuro do conjunctivo dos verbos *Vêr, Vir, Dar e Pôr.* 8

8. A que conjugação, modo, e tempo pertencem os seguintes verbos:—*Disse, Dères, Verei, Faria, Possa, Haveria, Fosseis, Dir-te-hei, Elejamos, Vier, e Quereis?* 8

9. Quaes são os complementos da oração? Dê um exemplo. 6

10. De que genero são os nomes seguintes:— 8

Espia, Nó, Rouxinol, Interprete, Epigramma, Martyr, Quadrante, Diadema, Corvo, Enigma, Neve, Cometa, Grei, Nao, Enxó, Sobrepeliz, Luz, e Liz?

11. Verta em Portuguez o seguinte:— 16

Greece thus again humbled remained quiet for a time. But the death of Alexander was the signal for fresh struggles, not only in the other parts of his vast empire, but also in Greece, which again began to long for freedom and independence. The immediate consequence of his death render that event one of the most important in the history of the world. His mighty hand had united under one sway countries and nations of the most different characters and dispositions; but his early death prevented him from binding them firmly together as parts of one great empire.

TUESDAY, 22ND NOVEMBER.

[10 A.M. TO 1 P.M.]

MARATHI.

BAL MANGESH WAGLE, M.A., LL.B.

[The figures to the right indicate full marks.]

1. How do you distinguish अनुस्वार and अनुनासिक? 3
Illustrate your answer by examples.

2. Combine the following words according to the rules of संधि 5

वाक् + पति; वाक् + हरि; सत् + जन;

वाक् + मन; भगवत् + लीला.

3. Analyse the following words :— 5

रामायण, अधोमुख, निषिद्ध, प्रौढ, गवाक्ष.

4. Decline लाडू and सासू. 2

5 What is understood by the term सहायधातू in grammar? Illustrate your answer by examples. 5

6. What is the difference in the import of such combinations as अडोशी पडोशी, आंधळा पांगळा, and लंगडा लुला on the one hand, and शेत भात, वेणी फणी, and पान पत्रावळ on the other? 5

7. State the characteristic difference between the कर्मणि and भावे प्रयोग. 5

8. What is a समास and how do you distinguish कर्मधारय and बहुव्रीहि.

9. Annotate the following sentences and amend them if necessary, giving your reasons in full :— 10

तूं गोष्ट सांगितलीस.

तुह्मी कामें केलींत.

मी मुलीला निजावेलीं.

मी तुला शहणा केला.

शिवाजीने आपणास राजा ह्मणविले.

10 Translate into English the following sentences — 10

(1) दैवापुढें कोणाचा उपाय चालत नाहीं.

(2) पुत्रस्मरणाने तिला पान्हा फुटला.

(3) तिच्या डोळ्याचे पाणी खळत नाहीं.

(4) हे पहाण्याचे त्याचे कपाळीं आलें.

(5) तिचा कंठ दाटला आणि तिला कंप सुटला.

11 Paraphrase the following श्लोक :— 5

ज्याच्या मस्तकिं दीर्घ नूतन जटा
फेटा दिसे टोप तो ॥
माजा वेष्टित वल्कले झळकती
दूजा ह्मणे कोण तो ॥
अश्चर्या अति पावली बघुनियां
तूणीर पाठी बरी ॥
राजीवाक्ष असा विलोकुनि वधू
धांवे जशी बावरी. ॥

12 Translate the following passage into English — 20

आर्नोल्ड साहेब आपल्या विद्यार्थ्यांशीं ममतेने बोलत असतच; परंतु सर्वदां दरएक विद्यार्थ्यावर पोटांतून त्यांच्या ममतेचा ओघ सारखा वाहत असे;

व नेहमी जरी ते अति गंभीरपणानें वागत असत तरी वेळोवेळीं त्या ममतेचा पूर दृष्टोत्पत्तीस आल्याशिवाय राहत नसे. एखादे वेळेस त्यांच्या विद्यार्थ्यानें अति मोठा अपराध करावा आणि त्यांस अतिशय राग यावा; तेव्हां लोकांस वाटावें कीं आतां या मुलावर यांची ममता अगदीं राहिली नसेल; परंतु अशा वेळेस देखील त्या विद्यार्थ्यावरची ममता तिळमात्र कमा होत नसे.

13. Translate into Maráthi the following passage :— 20

An elephant had frequently to pass over a small wooden bridge, leading from his master's house into the town. One day he seemed unwilling to cross over it, and it was only by goring him with a spear that the keeper forced him to venture on it. From his hesitation it was evident that he suspected there was something wrong, for he took care to test the strength of the bridge with his trunk before putting his weight upon it. After much trouble he at last ventured; but before he was half way, the bridge gave way, and both the elephant and his driver were precipitated into the river. By the fall the driver was killed, and the elephant much injured.

TUESDAY, 22ND NOVEMBER.

[10 A.M. TO 1 P.M.]

GUJARA'TI.

JAVE'RILA'L UMIASHANKAR YA'JNIK, ESQ.

[The figures to the right indicate full marks.]

1. Translate into English the following passage :— 30

એ સન્યાસીની વાત સઘળી સાંભળી એક યોગી ત્યાંહાં પાસે ઉભો હતો તે બોલ્યો:— "ભઇયા, કરે તે ભલો; મારે તેની તલવાર; અને પાળે તેનો ધર્મ છે. અમારા યોગીઓ તો દેહકષ્ટ કરેછે તેની આગળ તમારી તો

રમત છે. અમારામાંથી કેટલાએક પોતાના હાથ એટલાં વરસ સુધી બંધ રાખેછે કે નખ વધી હાથમાં પેસી જાય છે. કેટલાએક વરસનાં વરસ એકજ ઘાટીએ ઉભા રહેછે. તેઓના હાથ ઉંચા લાંબા રાખેછે તે એટલે સુધી કે નકામા પડવાથી તે હાથ ચીમળાઇ જાયછે અને જડ તથા અશક્ત થઇ જાયછે. કેટલાએક મોહોટા ભાર વહી જાયછે, અથવા તેઓના શરીરના કોઇ કોમળ ભાગમાં એક સાંકળની કડી ભેરવીને જ્યાંહાં જાયછે ત્યાંહાં તે સાંકળ ઘસડતા જાયછે. કેટલાએક વરસનાં વરસ સુધી અથવા કોઇ મોહોટા રાજ્યની પ્રદક્ષિણા કરી રહે ત્યાંહાં સુધી ભોંયઉપર કીડાની પેઠે પેટ ઘસડતા ચાલેછે. કેટલાએક જગન્નાથપુરી સુધી આખે રસ્તે પગે પડતા પડતા જાયછે અથવા શરીરને દડા જેવું કરી નાંખી સિંધુ નદીને કાંઠેથી ગંગા નદીના કાંઠાસુધી ગબડતા ગબડતા જાયછે. અને એવી રીતે જતાં જે કાંઇ પૈસા મળે તે એકઠા કરી તે વડે દેવાલય બંધાવેછે, કુવો અથવા વાવ ખોદાવેછે, અથવા કાંઈ ગુપ્ત પાપનું પ્રાયશ્ચિત્ત કરેછે. કેટલાએક ભર ઉનાળામાં એક ધીમા બળતા ઉપર ઝીંચકા ખાયછે, અથવા ઘણા આકરા તાપ ઉપર નીચું માથું રાખી ટંગાઇ રહેછે. કેટલાએક ભોંયમાં ગરદન સુધી દટાયછે અને શ્વાસ લેવાને એક નાહાનું કાણું રાખેછે. કેટલાએક શરીર ઉપર ચાબખા મારેછે. ખીલાની સેજ્યા ઉપર કેટલાએક સુવેછે. કેટલાએક જીવતાસુધી પોતાના શરીરને કોઇ ઝાડના થડ સાથે સાંકળવડે બાંધી લેછે. એ પ્રમાણે દેહકષ્ટ તેઓ કરેછે."

2. Parse the words underlined in the above passage. 3

3. Convert— 5

(a) એ મહીને પાંચસો કોરી લાવેછે into કર્મણિ and

(b) હું રોજ એને ઘેર જતો નથી.

into ભાવે constructions respectively.

4. What position does ક્રિયાનાથ occupy in a sentence in કર્ત્તરિ, કર્મણિ and ભાવે Prayôgas respectively? Give examples in each case. 4

5. Give the derivations of the following words, showing how far their current acceptations are in accord with those derivations :— 8

દેસાઈ; અગીઆરી; ગોવાળ; હુતાશની; મોસાળ; પિહેર; ભત્રીજો; ભોજાઇ; દીવાળી and હડતાળ.

6. Give appropriate Gujaráti renderings for the following :— 6

Put by; put off; put on; put out; put up; put up with; do with; do away with; done for; take down; take for; take off; take after; to be taken in.

7. Explain the following grammatical terms :— 6

સ્થાન; ઉપસર્ગ; પ્રત્યય; બહુવ્રીહિ; સિદ્ધ અને સાધિત; કૃદંત, and કેવળપ્રયોગી અવ્યય.

8. Translate the following into Gujaráti :— 20

This was in a marked degree the case with Lord Macaulay. His two famous contemporaries in English literature have, consciously or unconsciously, told their own story in their books. Those who could see between the lines in "David Copperfield" were aware that they had before them a delightful autobiography; and all who knew how to read Thackeray could trace him in his novels through every stage in his course, on from the day when as a little boy, consigned to the care of English relatives and school-masters, he left his mother on the steps of the landing-place at Calcutta. The dates and names were wanting, but the man

was there; while the most ardent admirers of Macaulay will admit that a minute study of his literary productions left them, as far as any but an intellectual knowledge of the writer himself was concerned, very much as it found them. A consummate master of his craft, he turned out works which bore the unmistakeable marks of the artificer's hand, but which did not reflect his features. It would be almost as hard to compose a picture of the author from the History, the Essays, and the Lays, as to evolve an idea of Shakespeare from Henry the Fifth, and Measure for Measure.

9. Explain the following proverbs, showing how they are applied, and giving, where possible, English phrases or proverbs conveying the like sense in each case :— 10

(૧). ડુંગરા દૂરથી રળિઆમણા.

(૨). દાઝ્યા ઉપર ડામ.

(૩). ખાળે ડાટા અને દરવાજા ઉઘાડા.

(૪). રાઇના પાડ રાતે વહી ગયા.

(૫). કાંકરે કાંકરે પાળ બંધાય અને ટીપે ટીપે સરોવર ભરાય.

10. Translate the following into idiomatic Gujarátí :— 8

(1). I shall be but too glad to accept your services.

(2). Our troops stole a march upon the enemy in taking up a commanding position on the hill-fort.

(3). It is quite on the cards that the Bill may be hurried through all its stages during the present Sessions of Parliament.

(4). No venture, no gain.

(5). Let no one deem the wise are dead
Who've 'shuffled off this mortal coil.'

TUESDAY, 22ND NOVEMBER

[10 A M TO 1 P M]

CANARESE

K ANANDRAO, ESQ

[The figures to the right indicate full marks]

1 State, with examples the rules according to which derivative nouns are formed in the Canarese language 10

2 Are there relative and possessive pronouns in the Canarese language? If not, how is the want supplied? Give some examples 10

3 How are adverbs formed in the Canarese language? Are they all declinable? Illustrate your answer by examples. 5

4 State, with examples, the various uses of the instrumental case in the Canarese language 5

5 Give the verbal nouns derived from the following roots — 5

ಅಡು to cook	ಬಾಳು to live
ನೆನೆ to recollect	ಕುಣಿ to dance
ಹೊಡೆ to beat	ಹೋಲು to resemble
ಉರಿ to smart	ಕಳು to steal
ಕೂಡು to join	ಹೇಸು to loath

6 How are causal verbs formed in the Canarese language? And how are they conjugated? Give examples 5

7 Translate the following into English — 10

ದಾಸಿತಂಗ್ ಏಕೆ ಕನ್ನಡಿಕಾಣಿ
ಗಾಳಿದೆತ್ತಿಗೆ ಗೆಜ್ಜೆ ಯೇತಕೆ
ಗೋಳಿಗೇತಕೆ ಗವಸಳಿಗೆ ನರಿಗೇಕೆ ಪರಲೋಕಾ ||
ರಾಣಿಯೇಕೆ ನಪುಂಸಕಗೆ ಗೀ
ರ್ವಾಣ ಭಾಷೆ ಯದೇಕೆ ಗೊಲ್ಲಗೆ
ಕೇಣ ಪಿಲ್ಲದ ವಿಷಯ ಲಂಪಟಗೇಕೆ ಪರಮ ಸುಖಾ ||

8 Paraphrase the following into Canarese prose — 10

ವೀರ ಮೇಲಿಗ ಗುಳ್ಳೆಯಂದದಿ
ತೋರಿಯಡಗುವ ಪಾಪಮ ಯಸಂ

ಸಾರ ಬಹಳಾರ್ಗ್ಯವದೊಳಗೆ ಮುಳುಗಿದೆನು ನಿಶ್ಚಯದಲೀ।
ತೋರಿಸಚಲಾನಂದ ಪದವಿಯ
ಶೇರಿ ಸಕಟಾ ನಿನ್ನ ಓಲ್ ನಮ
ಗಾರು ರಕ್ಷಕರುಂಟು ರಕ್ಷಿಸು ನಮ್ಮನನವರತಾ ॥

9 Translate the following into English — 20

ಈ ನಿನ್ನ ಮಕ್ಕಳಾಟವು ನಮ್ಮನ್ನು ಸಂತೋಷಿಸುವಂತೆ ಅನ್ಯರಿಗೆ ಛಂದವಾಗಿ ತೋರದು. ಗಂಡನು ಕೈಹಿಡಿಯುವ ತರುಣಿ ಕನ್ಯೆಗೆ ತಾಯಿತಂದೆಗಳು ಯಜಮಾನರಾಗಿರುವರು. ಬಳಿಕ ಯಜಮಾನನು ಗಂಡನಾಗಿರುತ್ತಾನೆ. ಆದ್ದರಿಂದ ಆ ಪತಿಯನ್ನೆ ಮುಖ್ಯವಾಗಿ ಆಶ್ರಯಿಸಿ ಕೊಂಡಿರು. ಅದರಿಂದ ಇಹ ಪರ ಯರಡೂ ಲೋಕಗಳನ್ನು ಜಯಿಸಿ ಕೊಳ್ಳುವಿ. ಸುಂದರಿಯೇ ಗಂಡನು ಉಣ್ಣುವದಕ್ಕೆ ಮೊದಲು ಉಣ ಬೇಡ. ಪತಿಯು ದೂರ ದೇಶಕ್ಕೆ ಪ್ರಯಾಣವಾಗಿ ಹೋಗಲು, ಹೆಚ್ಚಾದ ಭೂಷಣ ಗಳನ್ನು ಇಟ್ಟು ಕೊಳ್ಳ ಬೇಡ. ಸ್ನಾನ ಭೋಜನಾದಿಗಳಲ್ಲಿ ಪೂರ್ವಾಪರವೆಂಬ ನಿಯಮ ಉಂಟು. ಅಂದರೆ ಸ್ನಾನವು ಗಂ-ಡನಿಗೆ ಮೊದಲಾಗಿಯೂ ಭೋಜನವು ಪತಿಯ ನಂತರ ವಾ-ಗಿಯೂ ಮಾಡ ಬೇಕು.

10 Translate the following into Canarese :— 20

There is but one thing necessary to keep the possession of true glory, which is, to hear the opposers of it with patience, and preserve the virtue by which it was acquired When a man is thoroughly persuaded that he ought neither to admire, wish for, or pursue anything but what is exactly his duty, it is not in the power of seasons, persons, or accidents, to diminish his value. He only is a great man who can neglect the applause of the multitude, and enjoy himself independent of its favour. This is indeed an arduous task, but it should comfort a glorious spirit, that it is the highest step to which human nature can arrive. Triumph, applause are dear to the mind of man, but it is still a more exquisite delight to say to yourself, you have done well, than to hear the whole human race pronounce you glorious, except you yourself can join with them in your own reflections.

TUESDAY, 22ND NOVEMBER.

[10 A.M. TO 1 P.M.]

HINDUSTANI.

RAHIMTULAH MUHAMMAD SAYANI, M.A., LL.B.

[The figures to the right indicate full marks.]

1. Decline the noun کتاب in both numbers. 3

2. Decline the personal pronoun میں in both numbers. 3

3. How are the degrees of comparison generally expressed? 3

4. What is added to the root of a verb to form the infinitive? 2

5. How is the past participle in the two genders and numbers formed from the root? Give examples. 3

6. Give an example of each form of the present and future tenses. 3

7. What are the marks used in representing the long and short vowels in Hindustani? 3

8. Give the principal rules for determining the genders in Hindustani. 3

9. What is the difference in application of the pronouns 3

تو and آپ

10. Give the transitive and causal forms of— 4

جلنا and بولنا

11. Change the following substantives into adjectives :— 5

زور—وفا—دل—غم—نام and دولت

12. What is the general rule for the arrangement of the parts of a simple sentence in Hindustani? Give a few examples. 5

13. Translate the following sentences into Hindustani :— 30

(1) It is never too late to mend.

(2) Honesty is the best policy.

(3) Habit is a second nature.

(4) Consider well before you speak.

(5) The arbitrators made their award in writing.

(6) How long have you known him ?
(7) He did not meet with a kind reception.
(8) A hint to the wise is sufficient.
(9) It is too good to be true.
(10) Cæsar aimed at the Crown, but failed.

14. Translate into English— 30

ایک شخص کسي صاحب کمال بزرگ
کي خدمت مین گیا اور عرض کي که
حضرت مجھے کچھه ایسي نصیحت کرو که
جس سے مین دنیا مین آسوده رهون اور
آخرت مین بھي میرا بھلا هو انھون نے
فرمایا که خدائیتعالي کي بندگي مین سستي
متکر پھر اُسنے عرض کي حضرت کسطرح
کي بندگي کرون کہا که پہلے تو هر وقت
کي نماز ادا کرتا ره که خدا کا فرض هي
اُس مین کچھه قصور کرنا بڑا گناه هی اور
دین و شریعت کے حکم جو ضرور هین
اُنکو سیکھکے یاد رکھه لے اور اُسیکے موجب
اپنا کام کرتا جا اور جسوقت که گھڑي
آدھي گھڑي تو اپنے کام دھندھے سے
فرصت پاتا جاوے اُسوقت کسي جگھه
اکیلا چپکا بیٹھکے اپنے دل مین خدا کي

یاد لا اور اُس کا ڈر رکھه که وه میرا بڑا
خاوند هی جو کچھه مین کرتا هون سو وه
دیکھتا هی اسطرح تو خدا کي یاد اور
اُسکا ڈر اپنے دل مین رکھیگا تو اَسکي
برکت سے همیشه اچھے کام کریگا جس سے
دینا مین خوش رهیگا اور عاقبت مین
بھي تیرا بھلا هوگا

TUESDAY, 22ND NOVEMBER.
[10 A M TO 1 P M]

SINDHI.

ALUMAL TRIKAMDAS BHOJVANI, B A.

[The figures to the right indicate full marks]

1 Translate the following into English :— 25

بزرگ هڪڙي کان پڇاءُ جو ڪهنکي
ٺڪار ڪرڻ کپي چي ڪهنکي به نه
توڙي پاپي به ڪو هوي چاکان جو متان
مرڻ کان اڳي پاپن کان توبه ڪري ٺڦي
ڄي ڪوپ کان ڇٽي مگر جو ماڻهون
پهنجي پي کي ٺڪار ڪري تهنکي
ٺڪار جي—چي اهڙو ڪير آهي—چي
اُهو جو ٻئي جي پي کي ٺڪار ڏيئي

ان جي واتان پهنجي يي کي ٽڪار
چوائي پر مطلب هي آهي جو ڪهنڪي
بچڙو ڳا لهائڻ رڳو پاڻ لاءِ بچڙو ٻڌڻ
آهي سياڻا چوندا آهن جو ڪهنڪي بچڙو
ڳا لهائڻ جهڙو آرسي کي پونڊو ڏيڻ
هن سڀ ڳالهه مان مطلب هي نڪتو
جو زبان مان بچڙو اکر ڪڍڻ بچڙ آهي
چاڪان جو زبان ڏٽي جي قدرت جو
تپرس جهڙو اهڃاڻ آهي جا ڏسڻ ۾ رڳو
ماس جو ٽڪر ۽ منجهس ڳڻ گهڻان
هڪڙو هي جو ماڻهون جي بت ۾ رڳي
زبان حلال بيو زبان عقل جي نائب
آهي ٽيو دلجي ترجمان چوٿون سيني
لڳن جي۔مڪيه پنجون ڏٽي جي ذڪر
ڪرڻ جو وسيلو آهي ڏهين اهڙي مان
واري شئي کي بي مانو ڪري ساڻس
بچڙو ڳالهائڻ ڪهڙي نه ايائپ آهي

2. Translate into Sindhi the following :— 30

"The reason," replied his tutor, "is, that paltry and contemptible animals, possessing no confidence in their own strength and courage, and knowing themselves liable to in-

jury from most of those that come in their way, think it safest to act the part of bullies, and to make a show of attacking those of whom in reality they are afraid. Whereas animals which are conscious of force sufficient for their own protection, suspecting no evil designs from others, entertain none themselves, but maintain a dignified composure.

"Thus you will find it among mankind. Weak, mean, petty characters are suspicious, snarling and petulant. They raise a cry against their superiors in talents and reputation, of whom they stand in awe, and put on airs of defiance and insolence through mere cowardice. But the truly great are calm and inoffensive. They fear no injury and offer none."

3 Parse the following :— 7

سونهارا سورٿ ور کا منهنجي ڪر

4. Decline— 8

پيڪا—ڪتيون—ڪُهڙ—جَوِرَا

5. When does the verb in Sindhi agree in number and gender with the subject, and when with the object? Give examples. 10

6. How are parts of a simple sentence usually arranged in Sindhi? Give examples. 8

7. Conjugate مرڻ in all tenses and مارجڻ in the future tense only. 7

8. How are the degrees of comparison expressed in Sindhi? 5

TUESDAY, 22ND NOVEMBER.

[2 P.M. TO 4 P.M.]

ELEMENTARY NATURAL SCIENCE.

The Rev. D. MACKICHAN, M.A., B.D.;

The Rev. F. DRECKMANN, S.J.

[The figures to the right indicate full marks.]

1. Give the units of *length*, *volume* and *weight* on the British and metric systems. What are the advantages of the atter as compared with the former? 7

A cubical vessel contains 27 kilogrammes of water at 4° C., find the area of the side of the vessel.

2. A man carries a bundle at the end of a stick over his shoulder: show that as the portion of the stick between his shoulder and his hand is shortened, the pressure on his shoulder is increased. Does this change alter the pressure on the ground? Give the reason. 8

3. Which will be more advantageous, to employ two forces of 9 lbs. and 12 lbs. acting at right angles or two equal forces of 15 lbs. acting at an angle of 120°? 9

Can forces represented by 2, 3 and 6 lbs. be in equilibrium? Give the reason.

4. Give all the proofs you know of the rotundity of the earth and its rotation on its axis. 9

5. What changes would be produced on the earth if its axis were to place itself at right angles to the plane of the ecliptic? 8

6. Explain the causes of solar and lunar eclipses. Why do they not occur every lunar month? Why is a total solar eclipse visible only on a small portion of the earth's surface? 9

7. How are the fixed points on the thermometric scale determined? Show how to compare the Fahrenheit and centigrade scales. At what temperature would the reading on a Fahrenheit thermometer be exactly double the reading on a centigrade thermometer? 8

8. What is the chemical process which takes place in combustion? Give examples of different kinds of combustion. Explain why under ordinary circumstances the oxygen of the atmosphere does not combine with the nitrogen, and why combustion of the atmosphere produced under exceptional circumstances does not spread? 8

9. What are the properties of *hydrogen?* Describe how it is prepared by decomposing water with the aid of sodium. Give the equation, and calculate what weight of sodium would be required for the preparation of ten litres of hydrogen. 9

WEDNESDAY, 23RD NOVEMBER.

[2 P.M. TO 5 P.M.]

ARITHMETIC AND ALGEBRA.

GOVIND VITHAL KURKARAY, B.A.;
Khán Bahádur BOMANJI SORABJI, L.C.E.

[The figures to the right indicate full marks.]

1. If the income-tax be 7*d.* in the pound in the first half of the year, and $8\frac{1}{2}d$ in the second, what is the net income of a gentleman whose gross annual receipts are £1,542 10*s.* 6*d* ? 7

2. A passenger train going 41 miles an hour, and 431 feet long, overtakes a goods train on a parallel line of rails. The goods train is going 28 miles an hour, and is 713 feet long. How long does the passenger train take in passing the other? 9

3. Find the cost of painting the outside of a cubical box whose edge is 3·5 feet, at $1\cdot\dot{3}$ shillings per square yard. 9

4. A person invests Rs. 48,000 in the 4 per cents at 80, and at the end of each year invests the dividend which becomes due in the same stock; supposing the funds to remain at 80 for 3 years, find his dividend at the end of the third year. 8

5. Define *Discount*. If the discount on Rs. 2,261-5-4 due at the end of a year and a half be Rs. 128, what is the rate of interest? 7

6. Find the square root of $\frac{\cdot 00125}{\cdot 18}$ and the cube root of 423564 751. 10

7. Divide $a^2x^8 + (2ac - b^2)x^4 + c^2$ by $ax^4 + c - bx^2$. 7

8. Resolve $4a^2b^2 - (a^2 + b^2 - c^2)^2$ into four factors. 7

9. Find the square root of— 6

$$\frac{x^2}{y^2} + \frac{y^2}{4x^2} - \frac{x}{y} + \frac{y}{2x} - \frac{3}{4}.$$

10. Find the G. C. M. and L. C. M. of— 9

$$a^4 - x^4 \text{ and } a^3 - a^2x - ax^2 + x^3.$$

11. A train carrying three classes of passengers, at 6 as., 4 as. and 3 as., has eight times as many third class passengers as there are of the second class, and seven times as many second class passengers as there are of the first class. The 9

whole sum received is Rs. 290-6 as. How many first class tickets were issued?

12. Solve the following equations :— 12

$$(1)\ \frac{2x-9}{27}+\frac{x}{18}-\frac{x-3}{4}=8\tfrac{1}{3}-x.$$

$$(2)\ 1{\cdot}2x-\frac{{\cdot}18x-{\cdot}05}{{\cdot}5}={\cdot}4x+8{\cdot}9.$$

$$(3)\ \begin{cases}\dfrac{x+6}{y}=\tfrac{3}{4}\\[2ex] \dfrac{x}{y-2}=\tfrac{1}{2}\end{cases}$$

WEDNESDAY, 23RD NOVEMBER.

[10 A.M. TO 12 NOON.]

EUCLID.

GOVIND VITHAL KURKARAY, B.A.;

Khán Báhádur BAMANJI SORABJI, L.C.E.

[The figures to the right indicate full marks.]

1. Define scalene triangle, quadrilateral, semicircle, rectilineal angle, rectangle, and superficies. 3

2. Prove that parallelograms upon the same base and between the same parallels are equal to one another. 8

3. Of all triangles having the same vertical angle, and whose bases pass through a given point, the least is that whose base is bisected in the given point. 9

4. Divide a given straight line into two parts, so that the rectangle contained by the whole and one of the parts, shall be equal to the square on the other part. 9

5. If a straight line be divided into any two parts, the rectangles contained by the whole and each of the parts, are together equal to the square on the whole line. 6

6. In equal circles, equal straight lines cut off equal arcs, the greater equal to the greater, and the less to the less. 10

7. If AD, CE be drawn perpendicular to the sides BC, AB of the triangle ABC, and DE be joined, prove that the angles ADE and ACE are equal to each other. 10

8. Inscribe an equilateral and equiangular quindecagon in a given circle. 10

9. In a given circle inscribe a triangle whose angles shall be as $\frac{1}{4} : \frac{1}{2} : \frac{1}{2}$. 10

II.

PREVIOUS EXAMINATION.

EXAMINERS.

S. NEWCOME FOX, B.A. ... . F. G. SELBY, B.A. .. .. H. LITTLEDALE, B.A.	In English.
RAMKRISHNA GOPAL BHANDARKAR, M.A. .. SHANKAR PANDURANG PANDIT, M.A. ... YASHVANT VASUDEV ATHALE, M.A., LL.B ...	In Sanskrit.
A. BARRETT, B.A. .. .. The Rev. F. C. HARZHEIM, S.J.	In Latin and Greek.
MIRZA M COWSER, ESQ. ... . JAMSETJI PALANJI KAPADIA, ESQ.	In Persian.
J T. HATHORNTHWAITE, M.A. ... ... T S. TAIT, M.A , B.Sc. . .. The Rev. C. F. H. JOHNSTON, M.A. ... FARDUNJI MANCHERJI DASTUR, M.A. ...	In Mathematics.
S. NEWCOME FOX, B.A. ... ... M. MACMILLAN, B.A.	In History and Logic.
The Rev. D. MACKICHAN, M.A., B.D. .. The Rev. F. DRECKMANN, S. J.	In Natural Science.

MONDAY, 7TH NOVEMBER.

[10 A.M. TO 1 P.M.]

ENGLISH.

S. NEWCOME FOX, B.A.; F. G. SELBY, B.A.;
H. LITTLEDALE, B.A.

Byron, Giaour and Bride of Abydos; Miss Austen, Mansfield Park.

[The figures to the right indicate full marks.]

1. Give, in correct English prose, the story of the Bride of Abydos. 15

2. Translate into English prose— 25

(*a*) Approach, thou craven crouching slave,
Say, is not this Thermopylæ?
These waters blue that round you lave,
Oh! servile offspring of the free—
Pronounce what sea, what shore, is this?
The gulf, the rock, of Salamis!
These scenes, their story not unknown,
Arise, and make again your own;
Snatch from the ashes of your sires
The embers of their former fires.

(*b*) Zuleika, mute and motionless,
Stood like that statue of distress,
When, her last hope for ever gone,
The mother harden'd into stone;
All in the maid that eye could see
Was but a younger Niobe.
But ere her lip, or even her eye,
Essay'd to speak, or look reply,
Beneath the garden's wicket porch
Far-flashed on high a blazing torch!
Another—and another—and another—
"Oh! fly—no more—yet now my more than brother!"

3. Paraphrase— 25

(*a*) Starting, the lady instinctively moved a step or two, but recovering herself in a moment, affected to laugh, and asked him, in a tone not much louder, 'If he would give her away?'

(*b*) Mr. Rushworth is the sort of amiable modest young man who wants a great deal of encouragement, and

there were girls enough on the catch for him if we had been idle. But I left no stone unturned.

(c) The Portsmouth girls turn up their noses at anybody who has not a commission. One might as well be nothing as a midshipman.

(d) I exclude extremes, of course; and a close resemblance in all these points would be the likeliest way to produce an extreme. A counter-action, gentle and continual, is the best safeguard of manners and conduct.

4. Explain, so as to show that you understand the construction— 15

(a) Stain'd with each evil that pollutes
Mankind, when least above the brutes.

(b) That pause, which ponder'd o'er its fate,
Oh, who its dreary length shall date!

(c) So writhes the mind Remorse hath riven,
Unfit for earth, undoom'd for heaven,
Darkness above, despair beneath,
Around it flame, within it death.

(d) Zuleika came, and Giaffir felt
His purpose half within him melt.

(e) I have a tale thou hast not dream'd,
If sooth, its truth must others rue.

(f) But life is hazard at the best; and here
No more remains to win, and much to fear,
Yes, fear!

5. Explain fully *the italicised portions only* of— 15

(a) There was another *family living* actually held for Edmund.

(b) If I can but *make both ends meet.*

(c) In spite of the importance of her riding on horseback, no measures were taken *for mounting her again.*

(d) Dr. Grant and Mrs. Norris were seldom good friends; *their acquaintance had begun in dilapidations.*

(e) Miss Bertram might be said to have *two strings to her bow.*

(f) What else have you been *spunging?*

(g) You will have no objection *to join us in a rubber.*

(*h*) I was surprised to see Sir Henry *such a stick.*

(*i*) A very pretty income *to make ducks and drakes with.*

(*j*) You and Miss Crawford have made me *too nice.*

(*k*) I'd *give her the rope's end.*

(*l*) So coolly *to canvass it.*

(*m*) Dr. Grant succeeded to *a stall in Westminster.*

6. Briefly explain :—Cut capers, squabbling, a memento, heart-whole, to dress a steak, jilted, an Indiaman, a sad flirt, a dawdle, officious, indigent. 5

N.B.—In translating into English prose, students are directed to give a *close* and at the same time an *idiomatic* rendering. No merit will be assigned to a loose paraphrase that evades the difficulties of expression and meaning in the original.

MONDAY, 7TH NOVEMBER.

[2 P.M. TO 4 P.M.]

ROMAN HISTORY.

S. NEWCOME FOX, B.A. ; M. MACMILLAN, B.A.

[The figures to the right indicate full marks.]

N.B.—Dates to be given throughout.

1. What was the origin of the Roman Navy? Sketch shortly its chief exploits and disasters during the wars with Carthage. 10

2. State briefly the principal changes that were made in the constitution of the Senate during the period of history under review. 12

3. What part was played by M. Atilius Regulus in the First Punic War? 5

4. For what are the following places memorable :— 8

Cynoscephalæ, Magnesia, Pydna, Aquæ Sextiæ.

5. Write short lives and characters of P. Cornelius Scipio (Æmilianus) and C. Sempronius Gracchus. 10

6. Give some account of *one* of the following:— 10

(*a*) The Censorship of Cato the Elder.

(*b*) The Consulship of Cicero.

7 Mention the prominent incidents in Sylla's career, and contrast his general capacity with that of the elder Marius. 10

8 When and in whose interest did Mark Antony first take office? Give an outline of his life down to the battle of Philippi 10

TUESDAY, 8TH NOVEMBER.

[10 A.M. TO 1 P.M.]

SANSKRIT.

RAMKRISHNA GOPAL BHANDARKAR, M A., HON. M.R.A.S. ;
SHANKAR PANDURANG PANDIT, M.A. ;
YASHVANT VASUDEV ATHALE, M.A., LL.B.

[The figures to the right indicate full marks]

(*Arrange your answers to the three Sections in separate bundles*).

Sakuntala.

SECTION I.

1. Translate into English— 14

(a) नियमयसि विमार्गप्रस्थितानात्तदण्डः
प्रशमयसि विवादं कल्पसे रक्षणाय ।
अतनुषु विभवेषु ज्ञातयः सन्तु नाम
त्वयि तु परिसमाप्तं बन्धुकृत्यं प्रजानाम् ॥

Do you approve of the Calcutta reading संविभक्ताः instead of सन्तुनाम in the third line? Give reasons for your approval or objection.

(b) स्वप्नो नु माया नु मतिभ्रमो नु
क्लिष्टं नु तावत्फलमेव पुण्यम् ।
असन्निवृत्त्यैतदतीतमेव
मनोरथानामतटप्रपातः ॥

(c) सुतनु हृदयात्प्रत्यादेशव्यलीकमपैतु ते
किमपि मनसः समोहोमे तदा बलवानभूत् ।
प्रबलतमसामेवंप्रायाः शुभेषु हि वृत्तयः
स्रजमपि शिरस्यन्धः क्षिप्तां धुनोत्यहिशङ्कया॥

2. Explain the following, giving the context in each case :— 9

(a) काममेतदभिनन्दनीयं । तथापिवयमत्रमध्यस्थाः।

(b) स्फुरतो मे हस्तावस्य वध्यस्य सुमनः पिनद्धुम्.

(c) एषनामानुगृहीतो यः शूद्रादवतार्य हस्तिस्कन्धे प्रतिष्ठापितः

(d) अहो भावानुप्रवेशः ।

(e) बानायन त्वमपि स्वं नियोगमशून्यं कुरु.

(f) अहो ईदृशी स्वकार्यपरता अस्य संतापेनाहंरमे.

(g) प्रथमः कल्पः

3. Define प्रवेशक and distinguish it from a विष्कम्भक and अङ्कावतार. 4

4 Frame or quote sentences illustrating the use of the following particles :— 5

कामं, अन्तरेण, यावत्, स्थान, स्वित,
दिष्टया.

5. Scan the following lines and name the metres :—

(a) जाहिणव महुलोलुवो तुमं तहपरिचुम्बिअचूअमञ्जरी.

(b) सुरसखस्य हरेरुभयैःकृतं.

(c) तव सुचरितमङ्गुलीयनूनं प्रतनुममेव विभाव्य-
ते फलेन.

SECTION II.

6. Give instances of words and expressions used in the Pañchatantra, which in your opinion do not belong strictly to the vocabulary and the idiom of classical Sanskrit. 5

7. Translate into English — 7

तृणानि भूमिरुदकं वाक् चतुर्थीच सूनृता ।
सतामेतानि हर्म्येषु नोच्छिद्यन्ते कदाचन ॥
स्वागतेनाभ्ययस्तृप्ता आसनेन शतक्रतुः ।
पादशौचेन गोविन्दो अर्घ्याच्छम्भुस्तथातिथेः ॥
अविरुद्धं सुखस्थं यो दुःखमार्गे नियोजयेत् ।
जन्मजन्मान्तरे दुःखी स नरः स्यादसंशयम् ॥
सत्यानृता च परुषा प्रियवादिनीच
हिंस्रा दयालुरपि चार्थपरा वदान्या ।
भूरिव्यया प्रचुरवित्तसमागमा च.
वेश्याङ्गनेव नृपनीतिरनेकरूपा ॥

Derive सूनृता, शतक्रतुः, गोविन्दः, दुःखम्, जन्मजन्मान्तरे and वेश्या.

8. Reproduce in Sanskrit concisely and as much as you can in the style of the Pañchatantra the story of Madotkata. 8

9. Translate into English — 15

जातेथ देवस्य तया विवाहमहोत्सवे
साहसलाञ्छनस्य
कृतार्थया पार्थिवकन्ययेव कीर्त्याप्य-
मुच्यन्त नृपाः समस्ताः

आशाप्रदीपेषु गतेषु शान्तिमशेष-
सौभाग्य गुणक्षयेण
तदीय धूमैरिव धुसराङ्गाः क्षोणीभुजः
श्यामलिमानमापुः
क्रमक्रमं कर्तुमभूदपेक्षा वैलक्ष्यभाजां
न महीपतीनाम्
श्री विक्रमाङ्कस्य न कङ्कयत्रा स्ते किंतु
सद्याः समराङ्गणेषु
यथागतेनैव पथा गतेषु भूपेष्वथ-
म्लानमनोरथेषु
रेमे तया भूमिपतिः श्रियेव दैत्यप्रमा-
थार्जितया मुरारिः ॥

SECTION III.

10. Translate into Sanskrit— 30

But the nobles of Persia, in the bosom of luxury and despotism, preserved a strong sense of personal gallantry and national honour. From the age of seven years they were taught to speak truth, to shoot with the bow, and to ride; and it was universally confessed, that in the two last of these arts they had made a more than common proficiency. The most distinguished youth were educated under the monarch's eye, practised their exercises in the gate of his palace, and were severely trained up to the habits of temperance and obedience in their long and laborious parties of hunting.

TUESDAY, 8TH NOVEMBER.

[10 A.M. to 1 P.M.]

GREEK.

A. BARRETT, B.A. ; The Rev. F. C. HARZHEIM, S.J.

[The figures to the right indicate full marks.]

1. Translate into Greek, using the expressions of the Anabasis ; translate all subordinate *clauses* by participial *phrases* :— 25

Cyrus received Orontes as a friend, in the opinion that he might perhaps be useful to him. But Orontes was not ashamed of betraying Cyrus, after he had received benefits from him and had for a long time enjoyed his friendship. —Cyrus said, "I am conscious to myself that I have treated you well and have not injured you in anything. It was my conviction that you would not only feel but also prove thankful towards me. Now, however, it becomes evident from your letter to the king that you are determined to withdraw with the intention to betray me."—Although the Athenians during the night had narrowly escaped going down with their ships, yet on the following day they embarked once more, because they did not wish to give up their friends against whom the Lacedæmonians waged war.

2. Translate into Greek, using attraction in the relative clauses where possible :— 25

Instead of such idle conversations as you have now, thinking it impossible to force the passage, have confidence in your strength. Let us take up our arms and try what we are able to effect.—My son, forgetful of what he has promised to me, associates with those whom he should avoid. I fear he will fare worse even than he does now. I hope, however, he will finally come round.—With such as Plato and Xenophon are, must converse whosoever wishes to attain wisdom. —In the soldiers whom I have collected from among the Greeks consists the strength of my army. If they refuse to proceed, I must give up the war against the king.

3. Translate— 15

(*a*) *Ναὶ μὰ τόδε σκῆπτρον, τὸ μὲν οὔποτε φύλλα καὶ ὄζους*
φύσει ἐπειδὴ πρῶτα τομὴν ἐν ὄρεσσι λέλοιπεν,
Οὐδ' ἀναθηλήσει· περὶ γάρ ῥά ἑ χαλκὸς ἔλεψεν
φύλλα τε καὶ φλοιόν· νῦν αὖτέ μιν υἷες Ἀχαιῶν
ἐν παλάμῃς φορέουσι δικασπόλοι, οἵτε θέμωτας
προς Διὸς εἰρύαται· ὁ δέ τοι μέγας ἔσσεται ὅρκος.

Add some notes on Τό, *πρῶτα*, *περί*, *ἑ*.

What is the etymology of *δικασπόλοι*, *θέμισταs* ?

Give the root, the primitive meaning and Attic form of *Εἰρύαται*.

(*b*) *Τῶν νῦν μιν μνήσασα παρέζεο καὶ λαβὲ γούνων,*
αἴ κέν πως ἐθέλῃσιν ἐπὶ Τρώεσσιν ἀρῆξαι,
Τοὺς δὲ κατὰ πρύμνας τε καὶ ἀμφ' ἅλα ἕλσαι Ἀχαιοὺς
Κτεινομένους, ἵνα πάντες ἐπαύρωνται βασιλῆος.

Give the Attic forms for the Homeric forms. How is in *παρέζεο* the present stem formed from the root? Explain *ἐπί*; is an hiatus in *ἅλα ἕλσαι*?

(*c*) *Αἴθ' ὄφελες παρὰ νηυσὶν ἀδάκρυτος καὶ ἀπήμων*
ἧσθαι ἐπεί νύ τοι αἶσα μίνυνθά περ οὔτι μάλα δήν·
νῦν δ' ἅμα ὠκύμορος καὶ 'οἴζυρὸς περὶ πάντων
ἔπλεο· τῷ σε κακῇ αἴσῃ τέκον ἐν μεγάροισιν.

Which is the Attic, which the Homeric present stem to *ὄφελες*? Explain *μίνυνθα*, *περί*, *ἔπλεο*.

What about the metre in *κακῇ*?

(*d*) *εἴπερ γάρ κ' ἐθέλῃσιν 'Ολύμπιος ἀστεροπητὴς*
ἐξ ἑδέων στυφελίξαι· ὁ γὰρ πολὺ φέρτατός ἐστιν.
ἀλλὰ σὺ τόνγ' ἐπέεσσι καθάπτεσθαι μαλακοῖσιν·
αὐτίκ' ἔπειθ' ἵλαος 'Ολύμπιος ἔσσεται ἡμῖν.
τέτλαθι μῆτερ ἐμή, καὶ ἀνάσχεο κηδομένη περ.

Explain the construction of the first two lines.

What from syntax about *καθάπτεσθαι*?

Explain *τέτλαθι*; mention other tenses of the same verb.

From which root is *ἀνάσχεο* derived? Show how the different tenses of that verb are derived from the same root.

4. Describe the ceremonies of a Grecian sacrifice, adding the terms used by Homer. 5

5. Translate— 30

(*a*) *Ξενίας καὶ Πασίων ἀπέπλευσαν, ὡς μέντοι πλείστοις ἐδόκει, φιλοτιμηθέντες, ὅτι τοὺς στρατιώτας αὐτῶν παρὰ Κλέαρχον ἀπελθόντας ὡς ἀπιόντας εἰς τὴν Ἑλλάδα πάλιο, καὶ οὐ πρὸς βασιλέα, εἴα Κῦρος τὸν Κλέαρχον ἔχειν. ἐπεὶ δ' οὖν ἦσαν ἀφανεῖς διῆλθε λόγος ὅτι διώκοι αὐτοὺς Κῦρος τριήρεσι, καὶ οἱ μὲν εὔχοντο ὡς δολίους ὄντας αὐτοὺς ληφθῆναι· οἱ δ' ὤκτειρονεῖ ἀλώσοιντο.*

Give the imperfect and the future of ἔπλευσαν.

Which rule of syntax is applied in διώκοι?

Show how ληφθῆναι is formed from its root.

Explain ἀλωσοιντο.

(*b*) Κλέαρχος λαβὼν τοὺς ἱππέας ἤλαυνεν ἐπὶ τοὺς Μένωνος, ὥστε ἐκείνους ἐκπεπλῆχθαι καὶ αὐτὸν Μένωνα καὶ τρέχειν ἐπὶ τὰ ὅπλα. Οἱ δὲ καὶ ἔστασαν ἀποροῦντες τῷ πράγματι· ὁ δὲ Πρόξενος (ἔτυχε γὰρ ὕστερος προσιὼν καὶ τάξις αὐτῷ ἑπομένη τῶν ὁπλιτῶν) εὐθὺς οὖν εἰς τὸ μέσον ἀμφοτέρων ἄγων, ἔθετο τὰ ὅπλα καὶ ἐδεῖτο τοῦ Κλεάρχου μὴ ποιεῖν ταῦτα. Ὁ δὲ ἐχαλέπαινεν ὅτι αὐτοῦ ὀλίγου δεήσαντος καταλευσθῆναι πράως λέγοι τὸ αὐτοῦ πάθος· ἐκέλευέ τε αὐτὸν ἐκ τοῦ μέσου ἐξίστασθαι.

Explain the different constructions of ὥστε.

Which is the 1st person singular to ἔστασαν; mention other verbs that are similarly conjugated in the same tense.

Annotate on ὕστερος·

Explain the etymology and the meaning of ὁπλίτης. Which other classes of Grecian soldiers are mentioned by Xenophon and which arms were peculiar to each of them?

Explain πράως λέγοι.

(*c*) Οὐκοῦν, ἔφη ὁ Κῦρος, ὁπότ' αὖ ἔγνως τὴν σεαυτοῦ δύναμιν, ἐλθὼν ἐπὶ τὸν τῆς Ἀρτέμιδος βωμόν, μεταμέλειν τέ σοι ἔφησθα καὶ πείσας ἐμὲ πιστὰ πάλιν ἔδωκάς μοι καὶ ἔλαβες παρ' ἐμοῦ;

Annotate on ἐλθὼν ἐπὶ βωμόν.

Change this passage into indirect speech.

(*d*) Οὗ τοῦτο δέδοικα μὴ οὐκ ἔχω ὅ,τι δῶ ἑκάστῳ τῶν φίλων, ἂν εὖ γένηται, ἀλλὰ μὴ οὐκ ἔχω ἱκανούς, οἷς δῶ.

Give the plural to δέδοικα, and the present, future and aorist. Give the sentence in indirect speech, depending on Κῦρος ἔλεξεν.

(*e*) Παρετέτατο ἡ τάφρος ἄνω διὰ τοῦ πεδίου ἐπὶ δώδεκα παρασάγγας μέχρι τοῦ Μηδίας τείχους.

Give the present and future of παρετέτατο; how are they formed from the root?

Why is τάφρος feminine? Give other examples.

Give the length in English miles.

Annotate on Μηδίας τείχους.

(*f*) Τοσούτῳ πλήθει περιῆν βασιλεὺς ὥστε μέσον τὸ ἑαυτοῦ ἔχων τοῦ Κύρου εὐωνύμου ἔξω ἦν.

Describe the position of the two armies.

Which are the different meanings of μέσος, depending on its position?

Which is the etymology of εὐώνυμος, ἁμάξιτος, ἡμιόλιος, αὐτόμολος, ἄνυστός,

Why does Xenophon say θορύβου ἤκουσε, not θόρυβον?

What is the difference between ἤκουσα αὐτοῦ εἰπόντος and ἤκουσα αὐτὸν εἰπόντα and between ἄρξαντες τοῦ διαβαίνειν and ἀρξάμενοι διαβαίνειν?

TUESDAY, 8TH NOVEMBER.

[10 A.M. TO 1 P.M.]

LATIN.

A. BARRETT, B.A.; The Rev. F. C. HARZHEIM, S.J.

[The figures to the right indicate full marks.]

1. Translate:— 20

(*a*) Et jam finis erat, cum Jupiter æthere summo
Despiciens mare velivolum terrasque jacentis
Litoraque et latos populos, sic vertice cæli
Constitit et Libyæ definit lumina regnis.
Atque illum talis jactantem pectore curas
Tristior et lacrymis oculos suffusa nitentis
Adloquitur Venus: O qui res hominumque deumque
Æternis regis imperiis, et fulmine terres,
Quid meus Æneas in te committere tantum,
Quid Troes potuere, quibus, tot funera passis,
Cunctus ob Italiam terrarum clauditur orbis?
Certe hinc Romanos olim, voluentibus annis,
Hinc fore ductores, revocato a sanguine Teucri,
Qui mare, qui terras omni dicione tenerent,
Pollicitus, quæ te, genitor, sententia vertit?
Hoc equidem occasum Trojæ tristisque ruinas
Solabar, fatis contraria fata rependens.

(*b*) Postquam prima quies epulis, mensæque remotæ,
Crateras magnos statuunt et vina coronant.
Fit strepitus tectis, vocemque per ampla volutant
Atria; dependent lychni laquearibus aureis
Incensi, et noctem flammis funalia vincunt.

Hic regina gravem gemmis auroque poposcit
Implevitque mero pateram, quam Belus et omnes
A Belo soliti ; tum facta silentia tectis ;
Jupiter, hospitibus nam te dare jura loquuntur,
Hunc lætum Tyriisque diem Troiaque profectis.
Esse velis, nostrosque hujus meminisse minores

(*c*) Silent enim leges inter arma nec se expectari jubent, quum ei qui expectare velit ante injustâ pæna luenda sit quam justa repetenda. Et si persapienter et quodam modo tacite dat ipsa lex potestatem defendendi, quæ non modo hominem occidi, sed esse cum telo hominis occidendi caussa vetat, ut, quum caussa, non telum quæreretur, qui sui defendendi caussa telo esset usus, non hominis occidendi caussa habuisse telum judicaretur. Qua propter hoc maneat in caussa, judices; non enim dubito quin probaturus sim vobis defensionem meam, si id memineritis, quod oblivisci non potestis, insidiatorem jure interfici posse.

(*d*) Satis judicatum est a Pompeio, satis, falso ista conferri in Milonem, qui legem tulit, qua, ut ego sentio, Milonem absolvi a vobis opporteret, ut omnes confitentur, liceret. Quod vero in illo loco atque illis publicorum præsidiorum copiis circumfusus sedet, satis declarat se non terrorem inferre vobis—quid enim minuis illo dignum quam cogere ut vos eum condemnetis, in quem animadvertere ipse et more majorum et suo jure posset? sed præsidio esse, ut intelligatis contra hesternam illam contionem licere vobis quod sentiatis libere judicare.

2. Do you suppose this speech, as written, was actually delivered by Cicero? Give reasons for your answer. 5

3. Obviam fit ei Clodius expeditus, in equo, nulla rheda, nullis impedimentis, nullis Græcis comitibus, ut solebat, sine uxore, quod nunquam fere; quum hic insidiator, qui iter illud ad cædem faciendam apparasset, eum uxore veheretur in rheda, pænulatus, magno et impedito et muliebri ac delicato ancillarum puerorumque comitatu. 7

What argument does Cicero base upon this statement? Does his conclusion appear to have been a just one?

4. Explain—flaminem prodere; exitus publicis; judices; nata lex; ambusti tribuni plebis illæ intermortuæ contiones; salutarem literam; tristem literam; spoliatum imaginibus; Diem mihi, credo, dixerat, mulctam irrogarat, actionem perduellionis intenderat; eculeus; popa; conquisitores; me dius fidius. Explain the force of "nam" as an affix as in "quonam modo" 14

5. How do you account for the apparent difference of case in Romæ, Carthagine, &c., as expressing the place where an 7

action is done? What adverbs have a similar origin to these cases of proper names?

6. What is the etymology of coram; clam; erga; secundum; juxta; infra; circum; and how do you account for such forms as "bellum," "bis," &c.? 6

7. Explain carefully the following constructions:— 7

(a) In castra venerunt, causa purgandi sui;

(b) Hoc factum iri dixerunt: (each word of (b) must be parsed separately).

Give a rule for the use of "antequam" and "priusquam" with subjunctive and indicative.

8. Account for the use of the subjunctive in the following:— 10

(a) Id fecialis ubi dixisset, hastam in fines mittebat.

(b) Aristides expulsus est quod præter modum justus esset.

(c) Oderint dum metnant.

(d) Non is sum qui hæc faciam.

(e) Fidem Pompeii implorarunt: præstaret, quod recepisset.

Distinguish between "scio quid quæras" and "scio quod quæris;" and between "sunt qui" followed by the indicative and by the subjunctive.

9. Turn into Latin Prose— 24

Trajan, whether by martial inclinations, or (as some suppose) by dissatisfaction with his own position at Rome, when brought into more immediate connection with the Senate, was driven into needless war; and he achieved conquests in the direction of Dacia as well as Parthia. But that these conquests were not substantial,—that they were connected by no true cement of cohesion with the existing empire, is evident from the rapidity with which the Roman grasp was relaxed, and the provinces recoiled into the hands of their old masters. In the next reign, the empire had already rolled back within its former limits; and in two reigns further on, under Marcus Antoninus, though a prince of elevated character and warlike in his policy, we find such concessions of territory made to the Marcomanni and others, as indicate too plainly the shrinking energies of a waning empire.

TUESDAY, 8TH NOVEMBER.

[10 A.M. TO 1 P.M.]

PERSIAN.

MIRZA M. COWSEE, ESQ.; JAMSETJI PALANJI KAPADIA, ESQ.

[The figures to the right indicate full marks.]

HAFEZ, ODES XXX.—LX; ANVA'R-E-SUHIELI, CH. III. AND IV.

1. Give the comparative and superlative degrees of the following adjectives:— 4

صواب — عالم — قلیل — کامل

2. Give the singular forms of سیر — امصار — 2

مدایین — دول and the plural forms of—

ملک — ملک — ملک — ملک

with their English equivalents.

3. Explain what you understand from— 15

احرام بستن — شب قدر — روز الست

4. Give the equivalents of— 12

(a) Night-attacks, amulet, inspiration, mat, ladder, hook, sesame-seed, preference.

(b) جیب — جیب — سیر — سیر — الم — علم — سلاح — صلاح

5. Explain— 7

آهن سرد کوبیدن — دل برگرفتن —

دامن در چیدن — از جا رفتن —

مانده و درمانده — غنیمت شمردن — ششدر شدن

6. Translate into English :— 30

(a) انصاف درمیان آر که در مکافات نیکی
بدی کردن در کدام مذهب درست باشد
وصفای منفعت را بکدورت مضرت پاداش
دادن بچه طریق راست آید—مار گفت
عادت شما آدمیان چنان است—ومن هم بفتوای
شما عمل میکنم—و آنچه در بازار مکافات
از شما خریده ام بشما میفروشم—ع—
یک لحظه بجز آنچه فروشی همه سال

(b) و ملوک را یکی از رایهای درست و
تدبیرهای صائب آنست—که چون شوکت
وقدرت دشمن ظاهر کردد—و خوف آن
باشد که فساد واستیلای او در ممالک منتشر
شود—ورعیت در معرض هلاک وورطهٔ تلف
افتد —نقش حیلتی بر آورده کعبتین خصم
را به لطف باز مالد

(c) خوشتر زعیش صحبت وباغ وبهار چیست.
ساقی کجاست کو سبب انظار چیست
معنی آب زندگی و روضهٔ ارم
جز طرف جویبا رومی خوشکوار چیست

هر وقت خوش که دست دهد مغتنم شمار
کس را وقوف نیست که انجام کار چیست
پیوند عمر بسته بموئیست هوش دار
غمخوار خویش باش غم روزگار چیست
سهو و خطای بنده چو گیرند اعتبار
معنی عفو و رحمت پروردگار چیست
زاهد شراب کوثر و حافظ پیاله خواست
تا درمیانه خواستهٔ کردگار چیست

7. Translate into Persian— 20

Though I did not inform you from Shiráz what I had done in your commission, do not suppose I was neglectful. I shall present you with a copy of Sadi and Háfez that in point of correctness will not be easily equalled The Sadi I have purchased. It is in a fine hand, and has been written two hundred and fifty years ago. The Háfez is copied by a *Khosh Navees* from the celebrated copy that was collated from a hundred copies by Sheram Khán, and consecrated at the tomb of the author by that Prince. I have engaged three *Mullas* to compare the copy writing for me with that at the tomb, and to affix their seals on proof of its correctness.

TUESDAY, 8TH NOVEMBER.

[2 P.M. TO 4 P.M.]

ALGEBRA.

J T HATHORNTHWAITE, M A.; T. S TAIT, M A., B Sc.
The Rev. C F. H. JOHNSTON, M A.
FARDUNJI MANCHERJI DASTUR, M.A.

[The figures to the right indicate full marks]

1 If $A = qB + C$, show that the highest common divisor of B and C is also that of A and B. 12

Find the highest common divisor of—

$$16x^4 - 53x^2 + 45x + 6 \text{ and } 8x^4 - 30x^3 + 31x^2 - 12.$$

2. Simplify $\dfrac{15}{\sqrt{10} + \sqrt{20} + \sqrt{40} - \sqrt{5} - \sqrt{80}}$. 8

3. If α and β be the roots of the equation $ax^2 + bx + c = 0$, form the equation whose roots are $\dfrac{\alpha}{\beta}$, $\dfrac{\beta}{\alpha}$, and find the value of $\alpha^3 + \beta^3$. 12

4. If $\dfrac{a_1}{b_1} = \dfrac{a_2}{b_2} = \dfrac{a_3}{b_3} =$ &c., show that each is equal to $\dfrac{a_1 + a_2 + a_3 + \ldots}{b_1 + b_2 + b_3 + \ldots}$ and also to $\dfrac{(a_1^p + a_2^p + a_3^p + \ldots)^{\frac{1}{p}}}{(b_1^p + b_2^p + b_3^p + \ldots)^{\frac{1}{p}}}$. 10

If $\dfrac{a + bx}{b + cy} = \dfrac{b + cx}{c + ay} = \dfrac{c + ax}{a + by}$, then each $= \dfrac{1 + x}{1 + y}$.

5. Show how to find the sum of a given number of quantities in geometrical progression, the first term and the common ratio being supposed known. 10

Hence deduce the usual rule for finding the value of a recurring decimal.

6. The pth term of an arithmetical progression is q, and the qth term is p; find the $(p + q)^{th}$ term. 8

7. Find the number of homogeneous products of r dimensions that can be formed out of n letters abc ..... and their powers. 15

WEDNESDAY, 9TH NOVEMBER.

[10 A.M. TO 12 NOON.]

EUCLID.

J. T. HATHORNTHWAITE, M.A.; T. S. TAIT, M.A., B.Sc.; The Rev. C. F. H. JOHNSTON, M.A.; FARDUNJI MANCHERJI DASTUR, M.A.

[The figures to the right indicate full marks.]

1. If the diagonals of any pentagon be drawn, they will form by their intersection another pentagon. Prove that the 9

sum of the perimeters of the two pentagons is less than the sum of the diagonals of the original pentagon.

[*N.B.*—The pentagon is not given equilateral.]

2. In obtuse-angled triangles, if a perpendicular be drawn from either of the acute angles to the opposite side produced, the square on the side subtending the obtuse angle is greater than the squares on the sides containing the obtuse angle by twice the rectangle contained by the side upon which, when produced, the perpendicular falls, and the straight line intercepted without the triangle between the perpendicular and the obtuse angle. 10

If the sides of a triangle are as 2, 4, 5, examine whether it is acute-angled or obtuse-angled.

3. The angle at the centre of a circle is double of the angle at the circumference upon the same base. 10

Is this true when the base is greater than a semi-circle? If so, why has Euclid omitted this case? How will you prove from this proposition that the angle in a semi-circle is a right angle?

4. In a given triangle inscribe a circle. 10

If ABC be a triangle, show that the circle through B, C and the centre of the circle touching BC and the other sides produced passes through the centre of the inscribed circle.

5. The sides about the equal angles of equiangular triangles are proportionals and those which are opposite the equal angles are homologous sides. 12

Show that the diagonals of a trapezium, two of whose sides are parallel, cut one another in the same ratio.

6. If an angle of a triangle be bisected by a straight line which likewise cuts the base; the rectangle contained by the sides of the triangle is equal to the rectangle contained by the segments of the base, together with the square on the straight line which bisects the angle. 12

How many similar triangles are there in the figure of this proposition? Name them according to their homologous sides.

7. Inscribe a square in a given semi-circle. 12

WEDNESDAY, 9TH NOVEMBER.

[2 P.M. TO 4 P.M.]

LOGIC.

S. NEWCOME FOX, B.A.; M. MACMILLAN, B.A

[The figures to the right indicate full marks.]

1. Construct propositions predicating genus, species, differentia, and one separable and one inseparable accident of the common term bird. Show how it is that some predicables cannot be predicated of singular terms. 8

2. Give the quantity and quality of the following propositions, and convert them, using where necessary conversion by contra-position :— 2

A fool is known by his folly.

All the tortures they inflicted could not extract one groan.

All the Romans were not warlike.

Few Athenians fell at Marathon.

A few Athenians fell at Marathon.

A few Athenians vanquished at Marathon a large Persian army.

3. If it is true to say that only Romans worship Quirinus, what may be predicated with truth affirmatively and negatively of those who are not Romans, of Romans, of worshippers of Quirinus, and of those who are not worshippers of Quirinus? 8

4. Reduce Bramantip to the first figure by ostensive reduction and by reductio per impossibile. 8

5. Reduce the premisses of one fallacious conjunctive syllogism to simple propositions, and show that no conclusion can be legitimately deduced from the resulting simple propositions. 9

6. When may a conclusion be legitimately deduced from two particular premisses? Give an example of such an inference. 8

7. Explain by definitions and examples what is meant by dichotomy, generic difference, verbal proposition, argumentum ad hominem, and dilemma. 10

8. State in logical form and test the validity of the following arguments :— 12

(*a*) No one is a good rider unless he has been thrown two or three times; Mr. Smith has not been thrown two or three times; therefore Mr. Smith cannot be a good rider.

(*b*) Men are not brutes; brutes are irrational; all irrational beings are irresponsible; therefore men are not free from responsibility.

(*c*) Will love buy a jersey? Will it bring one to the opera? Will it in fine make the pot boil? No, but the dividend from the Government stock or the profit from the soap-boiling business will. Therefore Government stock or a soap-boiling business is better than love.

THURSDAY, 10TH NOVEMBER.

[10 A.M. TO 12 NOON.]

NATURAL SCIENCE.

The Rev. D. MACKICHAN, M.A., B.D.;

The Rev. F. DRECKMANN, S.J.

[The figures to the right indicate full marks.]

1 Define Velocity, Acceleration, Mass, Weight, Momentum. 12

In an Atwood's Machine the moveable weights are 160 grammes each, the surplus weight is 2 grammes; find the acceleration and the pace passed over in three seconds from rest.

2 Enunciate Boyle's law and Charles' law, and show how to prove the former experimentally. 12

Calculate the volumes at standard temperature and pressure of one litre of air taken at temperature 21° C and pressure 740 millimetres.

3. Show how to find the specific gravity of a solid body heavier than water, and explain the principle employed. 9

A piece of brass weighs 44 grammes in air, 39 grammes in water, and 39·75 grammes in alcohol; find the specific gravity of the brass and the alcohol.

4. Define energy and distinguish between kinetic and potential energy. Prove that the energy of a body of weight W moving with a velocity v is expressed by $\frac{Wvg}{2}$; show that this formula measures the energy in whatever direction the body is moving. 14

5. Define *wave-motion, wave-length, amplitude of vibration, transverse vibration, longitudinal vibration.* The wave-length of the lowest musical note is 21·25 metres, and according to some authorities that of the highest perceptible note is 13·6 millimetres: find the number of vibrations per second of these two notes. Velocity of sound in air = 340 metres. 13

6. Define: *unit of heat, specific heat, latent heat.* To ascertain the temperature of a furnace a platinum ball weighing 100 grammes is placed in it, and after it has assumed the temperature of the furnace it is dropped into one kilogramme of water at 9° *C*, the temperature of which is thereby raised to 13° *C*; what was the temperature of the furnace? 15

Specific heat of Platinum = 0·037.

III.

FIRST EXAMINATION FOR THE DEGREE OF BACHELOR OF ARTS, 1881-82.

EXAMINERS.

S. NEWCOME FOX, B.A.	In English.
F. G. SELBY, B.A.	
H. LITTLEDALE, B.A.	
RAMKRISHNA GOPAL BHANDARKAR, M.A. ...	In Sanskrit.
SHANKAR PANDURANG PANDIT, M.A. ...	
YASHVANT VASUDEV ATHALE, M.A., LL.B.	
A. BARRETT, B.A.	In Latin & Greek.
The Rev F. C. HARZHEIM, S.J.	
JOSEPH EZEKIEL, Esq....	Hebrew.
MIRZA M. COWSER, Esq.	In Persian.
JAMSETJI PALANJI KAPADIA, Esq.	
J. T. HATHORNTHWAITE, M.A.	In Mathematics.
T. S. TAIT, M.A., B.Sc.	
The Rev. C. F. H. JOHNSTON, M.A. ...	
FARDUNJI MANCHERJI DASTUR, M.A. ...	

MONDAY, 7TH NOVEMBER.

[10 A.M. TO 1 P.M.]

ENGLISH—PAPER I.

S. NEWCOME FOX, B.A.; H. LITTLEDALE, B.A.; F. G. SELBY, B.A.

[The figures to the right indicate full marks.]

Milton, Paradise Lost, I., II.; Burke, Select Works, 2 vols.

1. Translate into English prose— 25

All access was thronged; the gates
And porches wide, but chief the spacious hall
(Though like a covered field, where champions bold
Wont ride in armed, and at the Soldan's chair
Defied the best of Panim chivalry
To mortal combat, or career with lance),
Thick swarmed, both on the ground and in the air
Brushed with the hiss of rustling wings. As bees
In spring-time, when the sun with Taurus rides,
Pour forth their populous youth about the hive
In clusters; they among fresh dews and flowers
Fly to and fro, or on the smoothed plank,
The suburb of their straw-built citadel,
New-rubb'd with balm, expatiate, and confer
Their state affairs: so thick the airy crowd
Swarmed and were straitened; till, the signal given
Behold a wonder!

2. Briefly state the proposals made by Moloch, Belial, Mammon, and Beelzebub, respectively, in the Council of Pandemonium. 8

3. Milton twice compares Satan's appearance to that of the Sun; in what connection do these similes occur? 6

4. Write short notes explaining— 11

Night-foundered; the Dorian mood; recorders; Uther's son; manna; Atlantean shoulders; the palpable obscure; the sounding alchemy; the buxom air; sable—vested Night.

5. To what "six capital sources" does Burke trace "a fierce spirit of Liberty" in America? 5

6. Compare the Revolution in America with that in France, so as to explain why Burke sympathised with the one and abhorred the other. 20

7. To whom do the following passages allude? Explain them :— 10

(*a*) He hit the house just between wind and water.

(*b*) The Noble Lord in the Blue Riband.

(*c*) Suppose, Sir, that the angel of this auspicious youth, &c.

(*d*) Dr. Price, when he talks as if he had made a discovery, only follows a precedent.

(*e*) Little did I dream.....that she should ever be obliged to carry the sharp antidote against disgrace concealed in that bosom.

8. Explain clearly— 0

(*a*) Every good political institution must have a preventive operation as well as a remedial.

(*b*) Magna Charta, if it did not give us originally the House of Commons, gave us at least a House of Commons of weight and consequence.

(*c*) This sort of discourse does well enough with the lamp-post for its second : to men who *may* reason calmly, it is ridiculous.

(*d*) A perfect democracy is therefore the most shameless thing in the world.

(*e*) They served as a link to unite, in favour of one object, obnoxious wealth to restless and desperate poverty.

9. Burke's *Thoughts on the Cause of the Present Discontents* "is the virtual refutation of the *Patriot King*." Explain. 5

N.B.—In translating into English prose, candidates are directed to give a *close* and at the same time an *idiomatic* rendering. No merit will be assigned to a loose paraphrase that evades the difficulties of expression and meaning in the original.

MONDAY, 7TH NOVEMBER.

[2 P.M. TO 5 P.M.]

ENGLISH—PAPER II.

S. NEWCOME FOX, B.A.; H. LITTLEDALE, B.A.; F. G. SELBY, B.A.

[The figures to the right indicate full marks.]

Antony and Cleopatra and the Golden Treasury.

1. Describe the banqueting scene on board Pompey's ship, and show how it serves to bring out the most conspicuous points in the characters of Antony, Cæsar, Lepidus and Pompey. 25

2. Give, in correct English prose, the substance of Wordsworth's poem on Ruth and of Shelley's Ode to the West Wind. 15

3. What seems to you to be the prevailing tone of the poetry of Byron and of Hood? 10

4. Translate into English prose— 25

(*a*) When I have fears that I may cease to be
Before my pen has glean'd my teeming brain,
Before high-piled books, in charact'ry
Hold like rich garners the full-ripen'd grain;

When I behold upon the night's starr'd face
Huge cloudy symbols of a high romance,
And think that I may never live to trace
Their shadows, with the magic hand of chance;

And when I feel, fair Creature of an hour!
That I shall never look upon thee more,
Never have relish in the fairy power

Of unreflecting love—then on the shore
Of the wide world I stand alone, and think
Till Love and Fame to nothingness do sink.

(*b*) *Ant.*—I am not married Cæsar: let me hear
Agrippa further speak.

Agr.—To hold you in perpetual amity,
To make you brothers, and to knit your hearts
With an unslipping knot, take Antony
Octavia to his wife; whose beauty claims
No worse a husband than the best of men,
Whose virtue and whose general graces speak
That which none else can utter. By this marriage,

All little jealousies, which now seem great,
And all great fears, which now import their dangers,
Would then be nothing: truths would be tales,
Where now half tales be truths: her love to both
Would, each to other, and all loves to both,
Draw after her. Pardon what I have spoke,
For 'tis a studied, not a present thought,
By duty ruminated.

5. Give the etymology of the following words:— 10

Devotion, temper, extend, moment, scrupulous, religion, mature, absolute, reserve.

6. Explain— 15

(*a*) O! then we bring forth weeds,
When our quick winds lie still; and our ills told us,
Is as our earing.

(*b*) I shall entreat him
To answer like himself: if Cæsar move him,
Let Antony look over Cæsar's head. By Jupiter,
Were I the wearer of Antonius' beard,
I would not shave 't to-day.

(*c*) His cocks do win the battle still of mine,
When it is all to nought; and his quails ever
Beat mine, inhoop'd, at odds.

(*d*) Yet have my thoughts for thee been vigilant,
Bound to thy service with unceasing care—
The mind's least generous wish a mendicant
For nought but what thy happiness could spare.

(*e*) The child is father of the man:
And I could wish my days to be
Bound each to each by natural piety.

N.B.—In translating into English prose, students are directed to give a *close* and at the same time an *idiomatic* rendering. No merit will be assigned to a loose paraphrase that evades the difficulties of expression and meaning in the original.

TUESDAY, 8TH NOVEMBER.

[10 A.M. TO 1 P.M.]

SANSKRIT—PAPER I.

RAMKRISHNA GOPAL BHANDARKAR, M.A., Hon. Mem R.A.S
SHANKAR PANDURANG PANDIT, M A.;
YASHVANT VASUDEV ATHALE, M.A, LL.B.

[The figures to the right indicate full marks.]

Arrange your answers to the two Sections in separate bundles

SECTION I.

1. Translate into English— 14

(a) प्रणयिसखीसलीलपरिहासरसाधिगतै-
र्ललितशिरीषपुष्पहननैरपिताम्यतियत् ।
वपुषि वधाय तत्र तव शस्त्रमुपक्षिपतः
पततु शिरस्यकाण्डयमदण्ड इवैष भुजः ॥

Name the metre.

(b) आपूर्णश्चकलाभिरिन्दुरमलो यातश्च राहोर्मुखं
संजातश्च घनाघनो जलधरः शीर्णश्च वायोर्जवात् ।
निर्वृत्तश्च फलेग्रहिर्द्रुमवरो दग्धश्च दावाग्निना
त्वं चूडामणितां गतश्चजगतः प्राप्तश्च मृत्योर्वशम् ॥

(c) व्यतिकर इव भीमस्तामसो वैद्युतश्च
क्षणमुपहतचक्षुर्वृत्तिरुद्भूय शान्तः ।
कथमिह न वयस्यस्तत्किमेतत्किमन्य-
त्प्रभवतिहि महिम्ना स्वेनयोगीश्वरीयम् ॥

Does this stanza substantially occur elsewhere in Bhavabhûti's works? If it does, where and with what alterations?

2. Derive and give the different senses of the following words :— 7

वास्तव्य, पङ्क्तिपावन, वाचोयुक्ति, तीर्थ, काकतालीय, ऐदम्पर्य, बीभत्स, अस्तमय.

3. Explain the following, giving the context where necessary :— 10

(a) स्नेहश्च निमित्तसव्यपेक्षश्चेति विप्रतिषिद्धमेतत् ।

(b) प्रभवति निजस्य कन्यकाजनस्य महाराजः ।

(c) भगवत्येवंवादिनीत्याख्यायते ।

(d) प्रतिष्ठितो दुष्टदैवस्य दारुणसमारम्भसदृशः परिणामः ।

(e) गृहे गृहे पुरुषाः कुलकन्यकाः समुद्वहन्ति । न खलु कोऽप्यनपराद्धं कुलकुमारीजनं प्रभवामीति वाचानलेन प्रज्वालयति ।

(f) अहो वात्सल्यादतिक्रामति प्रसङ्गः ।

4. Name and define the kind of composition to which the Mâlatî-Mádhava belongs? 4

5. (a) What is बीभत्सरस ? Give an instance. 5

(b) How far has preternatural agency been resorted to in the development of the plot of the Mâlatî-Mádhava?

SECTION II.

6. Contrast the nature and functions of Indra, Varuna, and Rudra given in the Rigveda with the same as commonly believed. 5

7 Translate into English— 8

(a) हस्तग्राभस्य दिधिषोस्तवेदं पत्युर्जनित्वमभि सं बभूथ।

(b) इयं विसृष्टिर्यत आबभूव यदि वा दधे यदि वा न। यो अस्याध्यक्षः परमे व्योमन्त्सो अङ्ग वेद यदि वा न वेद॥

(c) न तिष्ठन्ति न नि मिषन्त्येते देवानां स्पश इह ये चरन्ति। अन्येन मदाहनो याहि तूयं तेन वि वृह रथ्येव चक्रा

(d) यो अन्तरिक्षे रजसो विमानः कस्मै देवाय हविषा विधेम

(e) यत्पुरुषेण हविषा देवा यज्ञमतन्वत।

(f) किं स्विदासीदधिष्ठानमारम्भणं कतमत्स्वित्कथासीत्।

8. Explain fully— 12

(a) यमो नो गातुं प्रथमो विवेद।

(b) यथायथा पतयन्तो वियेमिर एवैव तस्थुः सवितः सवाय ते।

(c) दृ॒ह॒स्य चि॒द्रो॑मतो॒ वि व्र॒जस्य॒ दुरो॑ वर्त॑
गृणते चि॑त्रराती ।

(d) स प॑प्रथा॒नो अभि॒ पञ्च॒ भूमा॑ त्रिवन्धु॒रो
मन॒सा या॑तु यु॒क्तः ।

(e) मातु॒र्दधि॑षु॒मब्र॒वं स्वसु॒र्जार॑ः शृणोतु॒नः

(f) नि ष॑साद धृत॒व्र॑तो वरु॒णः प॒स्त्या॒३॒ स्वा ।
साम्रा॑ज्याय सु॒क्रतुः॑ ।

(g) यत्किं॒चेदं॑ वरुण दैव्ये॒ जने॑ऽभि॒द्रोहं॑ म॒नुष्या॒३॒
श्चरा॑मसि । अचि॑त्ती यत्तव॒ धर्मा॑ युयो-
पिम मा॒ नस्तस्मादे॑नसो देव रीरिषः ॥

9. What are the various senses in which the following words are used in the Veda :— 10

वृत्रः, वृत्राणि, शची॑पतिः, शतक्रतुः, व्रजः, व्रतम्, ऋतम्, ऋतस्य सदनम्, गिर्वाहस्, ब्रह्मन्, ब्रह्मन्, ब्रह्मयुज्, दस्युः, देवयन्, अव्रतः, बोधि, उषर्बुध्, वाज, सुवीर्यम्, मन्तुमः

note passage wherever you can.

10. Describe the various formations and uses in the Veda of the subjunctive mood (the *let.*), quoting passages. Mention any other striking peculiarities of Vedic grammar. 5

11. What determines the accent in Sanskrit?

Correct the accent in the following:—

(a) येषां॑ सख्ये॒ असि॑ श्रि॒तः

(b) इन्द्र सोमं सोमपते पिबेमम्

(c) महो महानी पनयन्त्यस्येन्द्रस्य

(d) इन्द्रो वनस्पतीरसंनोदन्तरिक्षम्

12 Translate into English— 15

गृहन्गुणानहि विभावरीणां दिनप्रशंसां विदधन्निशासु ।

क्रमादसौ तां क्षितिमाचकाङ्क्ष यत्र द्वयं नास्ति दिनं निशा च ॥

त्रैलोक्यसंमोहनविद्ययेव तया जयास्थां महतीं दधानः ।

तं धन्विनां धुर्यमपि प्रहर्तुं विलासधन्वा धनुराचकर्ष ॥

निजप्रभानिहुतचन्द्रभासा प्रभातलक्ष्म्येव परिस्फुरन्त्या ।

तया समानीयत पाण्डिमानं चालुक्यभूपालकुलप्रदीपः ॥

शृङ्गाररत्नाकरवेलयेव तया प्रवेशे विहिते तरुण्या ।

नवानुरागेण मनस्तदीयं रत्नोत्करेणेव सनाथमासीत् ॥

TUESDAY, 8TH NOVEMBER.

[2 P.M. TO 5 P M.]

SANSKRIT—PAPER II.

RAMKRISHNA GOPAL BHANDARKAR, M.A., Hon. Mem. R.A.S
SHANKAR PANDURANG PANDIT, M.A.;
YASHVANT VASUDEV ATHALE, M.A., LL.B.

[The figures to the right indicate full marks.]

(Arrange your answers to the two Sections in separate bundles.)

Section I.

1. Explain the following :— 20

अस्ति सकलत्रिभुवनललामभूता प्रसवभूमिरिव कृतयुगस्यामृतफेनपुञ्जपाण्डुराभिर्दिशि दिशि दन्तवलभिकाभिर्धवलीकृता हरजटाचन्द्रेणेव कोटिसारेण स्मृतिशास्त्रेणेव सभावसथकूपप्रपारामसुरसदनसेतुयन्त्रप्रवर्तकेन संगृहीतगारुडेनापि भुजङ्गभीरुणा खलोप (*v. l.* सकलोप) जीविनापि प्रणयिजनोपजीव्यमानाविभवेन कामार्थपरेणापि धर्मप्रधानेन सुरभिमासमारुतेनेव सततदक्षिणेन लक्ष्मणेनेव रामाराधननिपुणेन बौद्धेनेव सर्वास्तिवादशूरेण (*v. l.* सर्वदानास्तिवादशूरेण) सांख्यागमेनेव प्रधानपुरुषोपेतेन जिनधर्मेणेव जीवानुकम्पिना विलासिजनेनाधिष्ठिता पशुपतिलास्यक्रीडेव सुधाधवलाट्टहासाऽवन्तीषूज्जयिनी नाम नगरी ।

Discuss the readings noted in the parentheses.

(*b*) तथाहि पदे वाक्ये प्रमाणे धर्मशास्त्रे पत्र-

छेद्ये दारुकर्मणि दन्तव्यापारयिन्द्रजालेऽन्येष्वपि-
कलाविशेषेषु परं कौशलमवाप.

(c) यस्मिंश्च राजनि गिरीणां विपक्षता प्रत्ययानां परत्वं दर्पणानामभिमुखावस्थानं ग्रहाणां तुलारोहणमगस्त्योदये विषशुद्धिर्मुनीनां योगसाधनं कुमारस्तुतिषु तारकोद्धरणं वयःपरिणामे दण्डग्रहणमसिपरिवारेष्वकुशलयोगः करिणां दानविच्छित्तिरक्षक्रीडासु शून्यग्रहदर्शनं पृथिव्यामासीत् ।

In the last we have instances of what is called परिसंख्या or नियमवान् श्लेष. Explain the परिसंख्या or नियम involved in them

2. Translate into English— 10

आलोकयतु तावत्कल्याणाभिनिवेशी लक्ष्मीमेव। प्रथममियं हि सुभटखड्गमण्डलोत्पलवनविभ्रमभ्रमरी लक्ष्मीः क्षीरसागरात्पारिजातपल्लवेभ्यो रागमिन्दुशकलादेकान्तवक्रतामुच्चैःश्रवसश्चञ्चलतां कालकूटान्मोहनशक्तिं मदिराया मदं कौस्तुभमणेरतिनैष्ठुर्यमित्येतानि सहवासपरिचयवशाद्विरहविनोदाचिह्नानि गृहीत्वैवोद्गता । अद्याप्यारूढमन्दरपरिवर्तावर्तभ्रान्तिजनितसंस्कारेव परिभ्रमति । कमलिनीसंवरणव्यतिकरलग्ननलिननालकण्टकेव न क्वचिन्निर्भरमाबध्नाति पदम्। नहि तं पश्यामि योह्यपरिचितयानया

म निर्भरमुपगूढे योवा न विप्रलब्धः । यथा यथा चेयं च-
पला दीप्यते तथातथा दीपशिखेव कज्जलमलिन-
मेव कर्म केवलमुद्वमति ।

3. State briefly your observations on the poetic genius and diction of Bâna. Determine his date. 8

Section II.

4. Why is चित्ररूप (diversified colour) considered to be an independent colour as distinguished from the black, white, red, &c., of which it is composed. 3

5. What are the *Karanas* and *Vyâpâras* in the case of Upamiti and S'âbda, and why? 6

6. All rational animals can be taught arithmetic. 8

Men are rational animals.

∴ Men can be taught arithmetic.

State this syllogism in the five-membered form. If one of the above propositions will have to be stated, according to the system of the Nyâya, in a form different from that it has in the European system, state the reason.

7. Explain— 12

(*a*) हेतुसमानाधिकरणात्यन्ताभावाप्रतियोगित्वं हेतुव्यापकत्वम् ।

(*b*) कार्यत्वावच्छिन्नकार्यतानिरूपितकारणता

(*c*) व्याप्यारोपेण व्यापकारोपस्तर्कः ।

Which of the terms in the Hindu syllogism must have the attribute defined in (*a*)? State of what species of कारणता is (*b*) a definition, and mention what things have it. What कारणता is opposed to this, and what modifications must be introduced in (*b*) so as to make it a definition of that कारणता? Explain how Tarka is a species of अयथार्थानुभव.

8. Under which of the Hetvâbhâsas do the fallacies of the illicit process of the Major and Petitio Principii fall? Explain by giving an instance. State the *Paksha*, *Sâdhya*, and *Hetu*, in each case. 8

9. Translate into Sanskrit— 25

If we contemplate a savage nation in any part of the globe, a supine indolence and a carelessness of futurity will be found to constitute their general character. In a civilized state, every faculty of man is expanded and exercised; and the great chain of mutual dependence connects and embraces the several members of society. The most numerous portion of it is employed in constant and useful labour. The select few, placed by fortune above that necessity, can, however, fill up their time by the pursuits of interest or glory, by the improvement of their estate or of their understanding, by the duties, the pleasures, and even the follies of social life.

TUESDAY, 8TH NOVEMBER.

[10 A.M. TO 1 P.M.]

GREEK—PAPER I.

A. BARRETT, B.A.; The Rev. F. C. HARZHEIM, S.J.

[The figures to the right indicate full marks.]

1. Translate— 20

(*a*) OI. Τίφῄς; ξυνειδὼς οὐ φράσεις, ἀλλ' ἐννοεῖς
ἡμᾶς προδοῦναι καὶ κατάφθεῖραι πόλιν;
TE. ἐγὼ οὔτ' ἐμαυτὸν οὔτε σ' ἀλγυνῶ. τί ταῦτ'
ἄλλως ἐλέγχεις; οὐ γὰρ ἂν πύθοιό που.
OI. οὐκ, ὦ κακῶν κάκιστε, καὶ γὰρ ἂν πέτρου
φύσιν σύ γ' ὀργάνειας, ἐξερεῖς ποτὲ,
ἀλλ' ὧδ' ἄτεγκτος κἀτελεύτητος φανεῖ;
TE. ὀργὴν ἐμέμψω τὴν ἐμήν· τὴν σὴν δ' ὁμοῦ
ναίουσαν οὐ κατεῖδες, ἀλλ' ἐμὲ ψέγεις.
OI. τίς γὰρ τοιαῦτ' ἂν οὐκ ἂν ὀργίζοιτ' ἔπη
κλύων, ἃ νῦν σὺ τήνδ' ἀτιμάζεις πόλιν;
TE. ἥξει γὰρ αὐτὰ, κἂν ἐγὼ σιγῇ στέγω.
OI. οὐκοῦν ἅ γ' ἥξει καὶ σὲ χρὴ λέγειν ἐμοί.

(*b*) ὕβρις φυτεύει τύραννον·
ὕβρις, εἰ πολλῶν ὑπερπλησθῇ μάταν,

ἃ μὴ 'πίκαιρα μηδὲ συμφέροντα
ἀκρότατον εἰσαναβᾶσ'
ἀπότομον ὤρουσεν εἰς ἀνάγκαν,
ἔνθ' οὐ ποδὶ χρησίμῳ
Χρῆται. Τὸ καλῶς δ' ἔχον
Πόλει πάλαισμα μήποτε λῦσαι θεὸν αἰτοῦμαι.
Θεὸν οὐ λήξω ποτὲ προστάταν ἴσχων.
εἰ δέ τις ὑπέροπτα χερσὶν ἢ λόγῳ πορεύεται,
Δίκας ἀφόβητος, οὐδέ,
δαιμόνων ἕδη σέβων
κακά νιν ἕλοιτο μοῖρα,
δυσπότμου χάριν χλιδᾶς,
εἰ μὴ τὸ κέρδος κερδανεῖ δικαίως
Καὶ τῶν ἀσέπτων ἔρξεται,
ἢ τῶν ἀθίκτων ἕξεται ματάζων.

2. In what sense are the following words used in the Œd. Rex :— 8

στέργω, κήδευμα, ἀνδρηλατέω, στόλος, ἄναξ, προστάτης, κύων, ἐναγής, βαιός, αἰκάλλω, αὐτοέντης.

What form of this last word is used by Herodotus? Distinguish between *συμφορά* and *συναλλαγή*.

3. Translate and annotate where necessary— 15

"*οἶσθ' ὡς ποίησον.*" "*μίασμα τοῦ τεθνηκότος·*" "*ξύμμετρος γὰρ ὡς κλύειν.*" "*εἴτι μὴ ξὺν ἀργύρῳ ἐπράσσετ' ἐνθένδε.*" "*ἀκτάν παρὰ βώμιον.*" "*τέλει γὰρ εἴ τι νὺξ ἀφῇ, τοῦτ' ἐπ' ἦμαρ ἔρχεται.*" • "*εἴπερ ὄρθ' ἀκούεις, Ζεῦ, πάντ' ἀνασσων.*"

Can you quote any idiom from a Latin or English author similar to this last?

"*ἔοικ' ἐμαυτὸν εἰς ἀρὰς δεινὰς προβάλλων ἀρτίως οὐκ εἰδέναι*"

What would be the more usual expression instead of *οὐκ εἰδέναι*?

4. Show the construction of the following :— 15

(*a*) *ἔρημος ἀνδρῶν μὴ ξυνοικούντων ἔσω.*

(*b*) *εὖ γὰρ οἶδ' ὅτι*
νοσεῖτε πάντες, καὶ νοσοῦντες, ὡς ἐγὼ
οὐκ ἔστιν ὑμῶν ὅστις ἐξ ἴσου νοσεῖ.

(*c*) *γῇ τῇδε τιμωρούντα τῷ Φεῷ θ' ἅμα.*

(*d*) *κἄμ' ἂν τοιαύτῃ χειρὶ τιμωρῖν θέλοι.*

(*e*) *μὴ παρῇς τὸ μὴ οὐ φράσαι.*

(*f*) *κοὐ μὴ στερηθῇς γ' ἐς τοσοῦτον ἐλπίδων ἐμοῦ βεβῶτος*

(*g*) *δέδοιχ' ὅπως μὴ 'κ τῆς σιωπῆς τῆσδ' ἀναρρήξει κακά.*

(*h*) *δυσάλγητος γὰρ ἂν εἴην τοιάνδε μὴ οὐ κατοικτείρων ἕδραν.*

5. What was the function of the chorus in Greek tragedy? In what respect does the language of the chorus differ from that of the other dramatis personæ? How do you account for this difference? Convert into Attic Greek all the non-Attic forms in the following:— 7

ὦ Διὸς ἀδυεπὲς φάτι, τὶς ποτε τᾶς πολυχρύσου
Πυθῶνος ἀγλαὰς ἔβας
Θήβας; ἐκτέταμαι φοβερὰν φρένα, δείματι πάλλων,
ἰήιε Δᾶλιε Παιὰν,
ἀμφὶ σοὶ ἀζόμενος, τί μοι ἢ νέον,
ἢ ἱπεριτελλομέναις ὥραις πάλιν ἐξανύσεις χρεός.
εἰπέ μοι, ὦ χρυσέας τέκνον Ἐλπίδος, ἄμβροτε, Φάμα.
πρῶτά σε κεκλόμενος, θύγατερ Διὸς, ἄμβροτ' Ἀθάνα,
γαιάοχόν τ' ἀδελφεὰν
Ἄρτεμιν, ἃ κυκλόεντ' ἀγορᾶς θρόνον εὐκλέα θάσσει
Καὶ Φοῖβον ἑκαβόλον.

6. Translate— 12

εἶπε πρὸς Κροῖσον τάδε· "Κροῖσε, ἀναρτημένου σεῦ ἀνδρὸς βασιλέος χρηστὰ ἔργα καὶ ἔπεα ποιέειν, αἰτέο τὴν δόσιν ἥν τινα βούλεαί τοι γενέσθαι παραυτίκα." ὁ δὲ εἶπε· "ὦ δέσποτα, εασας με χαριεῖ μάλιστα τὸν θεὸν τῶν Ἑλλήνων τὸν ἐν ἱμησα ἐγὼ θεῶν μάλιστα ἐπείρεσθαι πέμψαντα τάσδε τὰς πέδας, εἰ ἐξαπατᾶν τοὺς εὖ ποιεῦντας νόμος ἐστί οἱ;" Κῦρος δὲ εἴρετο ὅ τι οἱ τοῦτο ἐπηγορεύων παραιτέοιτο; Κροῖσος δέ οἱ ἐπανηλόγησε πᾶσαν τὴν ἑωυτοῦ διάνοιαν, καὶ τῶν χρηστηρίων τὰς ὑποκρίσιας, καὶ μάλιστα τὰ ἀναθήματα, καὶ ὡς ἐπαρθεὶς τῷ μαντηίῳ ἐστρατεύσατο ἐπὶ Πέρσας. λέγων δὲ ταῦτα κατέβαινε αὖτις παραιτεόμενος ἐπεῖναί οἱ τῷ θεῷ τούτῳ ὀνειδίσαι.

(*b*) *ἐγὼ μέν μιν οὐκ εἶδον εἰ μὴ ὅσον γραφῇ· καὶ γάρ δὴ καὶ σπάνιος ἐπιφοιτᾷ σφι, διὰ ἐτέων πεντακοσίων. φοιτᾶν δὲ τότε φασὶ, ἐπεάν οἱ ἀποθάνῃ ὁ πατήρ· ἔστι δὲ, εἰ τῇ γραφῇ παρόμοιος, τοσόσδε καὶ τοιόσδε· τὰ μὲν αὐτοῦ χρυσόκομα τῶν πτερῶν, τὰ δὲ ἐρυθρά· ἐς τὰ μάλιστα αἰετῷ περιήγησιν ὁμοιότατος, καὶ τὸ μέγαθος. Τοῦτον δὲ λέγουσι μηχανᾶσθαι τάδε, ἐμοὶ μὲν οὐ πιστὰ λέγοντες· ἐξ Ἀραβίης ὁρμεώμενον, ἐς τὸ ἱρὸν τοῦ Ἡλίου κομίζειν τὸν πατέρα ἐν σμύρνῃ ἐμ πλάσσοντα, καὶ θάπτειν ἐν τοῦ Ἡλίου τῷ ἱρῷ.*

7. Explain—"Τῶν σῦτερος μὲν διέφθαρτο." "οὔτε γὰρ συμοφρῇ τοιῇδε κεχρημένον οἰκός ἐστι ἐς ὁμήλικας εὖ πρήσσοντας ἰέναι, οὔτε τὸ βούλεσθαι πάρα". "συμφορῇ πεπληγμένον ἀχάρι," Account for the accentuation of πάρα and ἀχάρι in the two last quotations. 6

8. μέχρι μὲν τούτου ὄψις τε ἐμὴ καὶ γνώμη καὶ ἱστορίη ταῦτα λέγουσά ἐστι. 5

Mention some of the most important particulars which Herodotus ascertained from personal observation, and also some of those which he took upon hearsay. Show whether his ἱστορίη always resulted in accurate information.

9 Τὰ μέν νυν θεῖα τῶν ἀπηγημάτων οἷα ἤκουον οὐκ εἰμὶ πρόθυμος ἐξηγέεσθαι, ἔξω ἢ τὰ οὐνόμοτα αὐτῶν τοῦνον. 5

What was the probable reason of this reticence? Give examples of it.

10. Can you quote or refer to any γνῶμαι of similar import in these books of Herodotus and your play? 7

TUESDAY, 8TH NOVEMBER.

[2 P.M. TO 5 P.M.]

GREEK—PAPER II.

A. BARRETT, B.A.; The Rev. F. C. HARZHEIM, S.J.

[The figures to the right indicate full marks.]

1. Translate into Greek, trying to combine the sentences of each of the following passages, into one complex sentence:— 50

(a) At the beginning of the Phocian war the inclinations of the Athenians were as follows. They saw, indeed, that the Phocians did not act justly, yet they wished them not to be injured; and they rejoiced at whatever ills might befall the Thebans. It was not without reason that they were angry with them; for they had not been discreet in availing themselves of their success at Leuctra.

(b) After his expulsion from Euboea, Philip tried to find some other hold against Athens. He knew that the Athenians subsisted for the most part on imported provisions, and in order to make himself master of their supplies, he went to Thrace and asked his allies the Byzantines to join him in his war against Athens. They refused and told him no article to that effect was contained in their treaty. Upon this he fortified his camp near their city, put up his artillery and opened the siege.

(c) The fleet of the Athenians was in a state of decay. The rich citizens were, according to the law, after some trifling expenses free from contributions to it and the citizens of moderate or small possessions ruined their property by their payments. In consequence the state was not up to the requirements of the moment. Seeing this state of things, Demosthenes carried a law by which he forced the rich to do their duty, put a stop to the wrongs of the poor and, what was of the greatest advantage to the state, caused the preparations to be carried out in the proper time.

2. Translate— 40

(a) Οὕτω ἦν ὁ Φίλιππος ἐν φόβῳ καὶ πολλῇ ἀγωνίᾳ μὴ καὶ ταῦτα προειληφότος αὐτοῦ, εἰ πρὸ τοῦ τοὺς Φωκέας ἀπολέσθαι ψηφίσαισθε βοηθεῖν, ἐκφύγοι τὰ πράγματ' αὐτόν, ὥστε μισθοῦται τὸν κατάπτυστον τουτονὶ οὐκέτι κοινῇ μετὰ τῶν ἄλλων πρέσβεων ἀλλ' ἰδίᾳ καθ' αὑτὸν τοιαῦτα πρὸς ὑμᾶς εἰπεῖν καὶ ἀπαγγεῖλαι δι' ὧν ἅπαντ' ἀπώλετο.

Add some historical note on Φωκέας ἀπολέσθαι.

(b) Ἐγὼ μὲν γὰρ προὔλεγον καὶ διεμαρτυρόμην καὶ παρ' ὑμῖν ἀεὶ καὶ ὅποι πεμφθείην· αἱ δὲ πόλεις ἐνόσουν τῶν μὲν ἐν τῷ πολιτεύεσθαι καὶ πράττειν δωροδοκούντων καὶ διαφθειρομένων ἐπὶ χρήμασι, τῶν δε ἰδιωτῶν καὶ πολλῶν τὰ μὲν οὐ προορωμένων τὰ δὲ τῇ καθ' ἡμέραν ῥᾳστώνῃ καὶ σχολῇ δελεαζομένων, καὶ τοιουτονί τι πάθος πεπονθότων ἁπάντων, πλὴν οὔκ ἐφ ἑαυτους ἑκάστων οἰομένων τὸ δεινὸν ἥξειν, ἀλλὰ διὰ τῶν ἑτέρων κινδύνων τὰ ἑαυτῶν ἀσφαλῶς σχήσειν ὅταν βούλωνται.

What from Syntax about πεμφθείην ?

Explain the use of πλήν.

(c) Καί μοι λέγε πρῶτον μὲν τὸ ψήφισμα καθ' ὃ εἰσῆλθον τὴν γραφήν, εἶτα τοὺς καταλόγους, τόν τ' ἐκ τοῦ προτερου νόμου καὶ τὸν κατὰ τὸν ἐμόν.

Explain the construction of εἰσῆλθον ; add some synonym. Greek phrases.

Annotate on καταλόγους ; which was the difference between them ?

(d) Ἆρά γε μικρὰ βοηθῆσαι τοῖς πένησιν ὑμῶν δοκῶ, ἢ μικρὰ ἀναλῶσαι ἂν τοῦ μὴ τὰ δίκαια ποιεῖν οἱ πλούσιοι ; οὔ τοινυν μόνον τῷ μὴ καθυφεῖναι ταῦτα σεμνύνομαι, οὐδὲ τῷ γραφεὶς ἀποφυγεῖν, ἀλλὰ καὶ τῷ συμφέροντα θεῖναι τὸν νόμον καὶ τῷ πεῖραν ἔργῳ δεδωκέναι. πάντα γάρ τὸν πόλεμον

τῶν ἀποστόλων γιγνομένων κατὰ τὸν νόμον τὸν ἐμὸν οὐχ ἱκετηρίαν ἔθηκε τριήραρχος οὐδεὶς πώποθ' ὡς ἀδικούμενος παρ' ὑμῖν, οὐκ ἐν Μουνυχίᾳ ἐκαθέζετο, οὐχ ὑπὸ τῶν ἀποστολέων ἐδέθη, οὐ τριήρης οὐτ' ἔξω καταληφθεῖσα ἀπώλετο τῇ πόλει οὐδ' αὐτοῦ ἀπελείφθη οὐ δυναμένη ἀνάγεσθαι.

Explain the form of καθυφεῖναι.

Which prepositions might be added here to πάντα τὸν πόλεμον

Add explanatory notes on ἐν Μουνυχίᾳ ἐκαθέζετο.

(e) Τὴν προαίρεσίν μου σκόπει τῆς πολιτείας, μὴ τὰ συμβάντα συκοφάντει. εἰ δ' ὁ συμβὰς σκηπτὸς μὴ μόνον ἡμῶν, ἀλλὰ καὶ πάντων τῶν ἄλλων Ἑλλήνων μείζων γέγονε, τί χρὴ ποιεῖν; ὥσπερ ἂν εἴ τις ναύκληρον πάντ' ἐπὶ σωτηρίᾳ πράξαντα καὶ πᾶσι κατασκευάσαντα τὸ πλοῖον ἀφ' ὧν ὑπελάμβανε σωθήσεσθαι, εἶτα χειμῶνι χρησάμενον καὶ πονησάντων αὐτῷ τῶν σκευῶν ἢ καὶ συντριβέντων ὅλως, τῆς ναυαγίας αἰτιῷτο. ἀλλ' ἐκεῖνο λογίζου καὶ ὅρα, εἰ μετὰ Θηβαίων ἡμῖν ἀγωνιζομένοις οὕτως εἵμαρτο πρᾶξαι, τί χρῆν προσδοκᾶν εἰ μηδὲ τούτους ἔσχομεν συμμάχους, ἀλλὰ Φιλίππῳ προσέθεντο;

Explain the construction in the sentence ὥσπερ, &c.

Account from Syntax for the mood of αἰτιῷτο.

Give the root and other tenses of εἵμαρτο.

Why is not ἂν added to χρὴν προσδοκᾶν?

(f) Οὐκοῦν ἡμεῖς μὲν ἐν θυσίαις ἦμεν τότε, Θηβαῖοι δ' ἐν τῷ δὶ ἡμᾶς σεσῶσθαι νομίζειν, καὶ περιειστήκει τοῖς βοηθείας δεήσεσθαι δοκοῦσιν ἀφ' ὧν ἔπραττον οὗτοι, αὐτοὺς βοηθεῖν ἑτέροις ἐξ ὧν ἐπείσθητ' ἐμοί.

Explain the form and the meaning of περιειστήκει.

Of what time does Demosthenes speak here?

(g) Καὶ πρὸς τοῖς ἄλλοις, ὥσπερ αὐτὸς ἁπλῶς καὶ μετ' εὐνοίας πάντας εἰρηκὼς τοὺς λόγους, φυλάττειν ἐμὲ καὶ τηρεῖν ἐκέλευεν, ὅπως μὴ παρακρούσομαι μηδ' ἐξαπατήσω, δεινὸν καὶ γόητα καὶ σοφιστὴν καὶ τὰ τοιαῦτ' ὀνομάζων, ὡς ἐὰν πρότερός τις εἴπῃ τὰ προσόνθ' ἑαυτῷ περὶ ἄλλου, καὶ δὴ ταῦθ' οὕτως ἔχοντα καὶ οὐκέτι τοὺς ἀκούοντας σκεψομένους τίς ποτ' αὐτός ἐστιν ὁ ταῦτα λέγων.

Which other constructions of ὅπως μή would here be admissible, and why?

3. (a) Give the derivation of ἀκονιτί, ἑωλοκρασία, δελεάζω. 10

Explain ἐν ἐπηρείας τάξει, Μυσῶν λεία, ὥσπερ ἐξ ἁμάξης, Εὐρυβάτου πρᾶγμα.

What are the meanings of the forensic terms δίκαια, ἐν τῷ ὕδατι, βούλευμα and προβούλευμα?

What is the difference between νεώρια and νεώσοικοι?

(*b*) When did Ktesiphon propose to crown Demosthenes? When was the question decided? What was Demosthenes' object in this speech? What the result?

(*c*) Give a short sketch of the plan of the speech.

TUESDAY, 8TH NOVEMBER.

[10 A.M. TO 1 P.M.]

LATIN—PAPER I.

A. BARRETT, B.A.; The Rev. F. C. HARZHEIM, S.J.

[The figures to the right indicate full marks.]

1. Translate— 25

(*a*) Erat forte brumæ tempus et nivalis dies in locis Alpibus Apenninoque interjectis, propinquitate etiam fluminum ac paludium prægelidis. Ad hoc raptim eductis hominibus atque equis, non capto ante cibo, non ope ulla ad arcendum frigus adhibita, nihil caloris inerat: et quicquid auræ fluminis appropinquabant, afflabat acrior frigoris vis. Ut vero refugientes Numidas insequentes aquam ingressi sunt, (et erat pectoribus tenus aucta nocturno imbri) tum utique egressis rigere omnibus corpora, ut vix armorum tenendorum potentia essent, et simul lassitudine, procedente jam die, fame etiam deficere.

(*b*) Oppidani ad omnia tuenda atque obeunda multifariam distineri cæpti sunt: et non sufficiebant. Jam enim feriebantur arietibus muri, quassatæque multæ partes erant. Una continentibus ruinis nudaverat urbem: tres deinceps turres, quantumque inter eas muri erat, cum fragore ingenti prociderant: captumque oppidum ea ruina crediderant Pæni; qua, velut si pariter utrosque murus texisset, ita utrimque in pugnam procursum est. Nihil tumultuariæ pugnæ simile erat, quales in oppugnationibus urbium per occasionem partis alterius conseri solent: sed justæ acies, velut patenti campo, inter ruinas muri tectaque urbis modico distantia intervallo constiterant. Hinc spes, hinc desperatio animos irritat: Pæno cepisse jam se urbem, si paullulum annitatur credente; Saguntinis pro nudata mænibus patria corpora opponentibus, nec ullo pedem referente, ne in relic-

tum a se locum hostem immitteret. Itaque quo acrius et conferte magis utrimque pugnabant eo plures vulnerabantur, nullo inter arma corporaque vano intercidente telo.

2. Show by a sketch the point where Hannibal crossed the Rhone, and trace his march to the "Insula Allobrogum," marking the points of confluence with the Rhone of the Druentia and Isara. How far does Livy's account of the subsequent march across the Alps agree with that of other historians. State which account you consider most reliable. 10

3. Show clearly the construction of the following :— 15

(*a*) Quibus procuratis, Scipio, cum equitatu jaculatoribusque expeditis profectus ad castra hostium, exque propinquo copias, quantæ, et cujus generis essent, speculandas, obvius fit Hannibali.

(*b*) Quibusdam volentibus novas res fore (dixit).

(*c*) Varia inde pugna sequente, quanquam ad extremum æquassent certamen, major tamen hostium Romanis fama victoriæ fuit.

(*d*) Id quod unum maxime in præsentia desiderabatur, comitiis consularibus habitis, in hiberna rediit.

4. In what connection do the following names of people or places occur in this book :— 7

Maharbal; Alcon; Brancus; Clastidium L. Cincius Alimentus; Hiero; Zacynthus.

5. Explain—forum olitorium; de re-publica referre; primo quoque tempore; singulis vobis novenos ex-turmis manipulisque eligite; classici milites; votorum nuncupatio; sortes extenuatas; perorare; cum Gallis tumultuatum. 13

6. Translate into Latin— 30

Although not rewarded by a triumph, the conquest of Capua was one of the most important services ever rendered by a Roman general to his country. It did not merely deprive Hannibal of the greatest fruit of his greatest victory, and thus seem to undo the work of Cannæ; but its effect was felt far and wide, encouraging the allies of Rome, and striking terror into her enemies; tempting the cities which had revolted to return without delay to their allegiance, and filling Hannibal with suspicions of those who were still true to him, as if they only waited to purchase their pardon by some act of treachery towards his garrisons. By the recovery of Capua his great experiment seemed decided against him. It appeared impossible under any circumstances to rally such a coalition of the Italian states against the Roman power in Italy, as might be able to overthrow it. We almost ask,

with what reasonable hopes could Hannibal from this time forward continue the war? Or why did he not change the seat of it from S. Italy to Etruria and Cisalpine Gaul?

TUESDAY, 8TH NOVEMBER.

[2 P.M. TO 5 P.M.]

LATIN—PAPER II.

A. BARRETT, B.A.; The Rev. HARZHEIM, S.J.

[The figures to the right indicate full marks.]

1. Translate and annotate on the context and on the words in italics— 40

(*a*) Est mihi disparibus septem compacta *cicutis*
Fistula, Damœtas dono mihi quam dedit olim
Et dixit moriens te nunc habet ista *secundum*
Præterea duo nec tuta mihi valle reperti
Capreoli, sparsis etiam nunc pellibus *albo;*
Bina die siccant ovis ubera; quos tibi servo.
Jam pridem a me illos *abducere* Thestylis orat,
Et *faciet*, quoniam sordent tibi munera nostra.

(*b*) Ah Corydon, Corydon, quæ te dementia cepit!
Semiputata tibi frondosa vitis in ulmo est.
Quin tu aliquid saltem potins *quorum* indiget usus
Viminibus mollique paras detexere iunco?

(*c*) De grege non *ausim* quidquam *deponere* tecum,
Verum id quod multo tute ipse fatebere maius,
Insanire libet quoniam tibi, pocula ponam
Fagina, cœlatum divini opus Alcimedontis;
Lenta quibus torno facili super addita vitis
Diffusos hedera *vestit* pallente corymbos.

(*d*) D. *Triste* lupus stabulis, maturis frugibus imbres,
Arboribus venti, nobis Amaryllidis iræ.

M. Dulce satis humor, depulsis arbutus hoedis,
Lenta salix feto pecori, mihi, solus Amyntas.

D. Qui legitis flores et humi nascentia fraga,
Frigidus, o pueri, fugite hinc, latet anguis in herba.

M. *Parcite* oves nimium procedere, non bene ripæ
Creditur; ipse aries etiam nunc *vellera* siccat.

What is the name of couplets like the above? What their use and their laws?

(*e*) Extinctum nymphæ crudeli funere Daphnim
Flebant, vos coryli, testes et flumina nymphis,
Cum complexa sui corpus miserabile gnati
Atque deos atque astra vocat crudelia mater.
Non ulli pastos illis egere diebus
Frigida, Daphni, boves ad flumina, nulla neque amnem
Libavit quadrupes nec graminis attigit herbam.
Daphni, tuum Poenos etiam *ingemuisse* leones
Interitum montesque feri silvæque loquuntur
Daphnis et Armenios curru subjungere tigres
Instituit, Daphnis thiasos inducere Bacchi
Et foliis lentas intexere mollibus *hastas*.

Who was Daphnis? Whom does he here represent? Give your reasons by quoting or referring to other passages of this eclogue.

(*f*) Tum *Phaetontiadas* musco *circumdat* amaræ
Corticis atque solo proceras erigit alnos.
Tum canit errantem Permessi ad flumina *Gallum*
Aonas in montes ut duxerit una *sororum*,
Utque viro Phoebi chorus adsurrexerit omnis;
Ut Linus hæc illi divino carmine pastor
Floribus atque apio *crines* ornatus amaro
Dixerit: hos tibi dant calamos, en accipe, Musæ,
Ascræo quos ante seni, quibus ille solebat
Cantando rigidas deducere montibus ornos.
His *tibi Grynei* nemoris dicatur origo
Ne quis sit lucus quo se plus iactet Apollo.

2. Translate, adding to each passage notes on the philosophical doctrines which it refers to and other notes on the words in italics. 50

(*a*) Tum Cotta comiter, ut solebat: Atqui, inquit, Velleï, nisi tu aliquid dixisses, nihil sane ex me quidem audire potuisses. Mihi enim non tam facile in mentem venire solet quare verum sit aliquid, quam quare falsum. Idque quum sæpe tum, quum te audirem paullo ante, contigit. *Roges* me qualem deorum naturam esse ducam, nihil fortasse respondeam Quæras putemne talem esse, qualis modo a te est exposita, nihil dicam mihi videri minus.

(*b*) Illud vero ab Aristotele animadversum, a quo pleraque, quis potest non mirari? Grues quum loca calidiora petentes maria *transmittant* trianguli efficere formam, eius autem summo angulo aer ab iis adversus pellitur, deinde sensim *ab utroque latere*, tanquam remis ita pennis cursus avium levatur.

Basis autem trianguli *quem* efficiunt grues, ea tanquam a puppi ventis adiuvatur eæque in tergo prævolantium colla et capita reponunt; quod quia ipse dux facere non potest, quia non habet cui *innitatur*, revolat, ut ipse quoque quiescat. In eius locum una succedit ex iis quæ acquierunt, eaque vicissitudo in omni cursu conservatur. Multa eiusmodi proferre possum, sed genus ipsum videtis. Jam vero illa etiam notiora, quanto se opere custodiant bestiæ, *ut* in pastu circumspectent, ut in cubilibus delitescant.

(*c*) Ita vultis, opinor, nihil esse animal et sentiens in natura atque mundo præter ignem. Qui magis quam præter animam unde animantium quoque constet animus, ex quo animal dicitur? Quo modo autem hoc quasi concedatur, sumitis, nihil esse animum nisi ignem? Probabilius enim videtur tale quiddam esse animum, ut sit ex igni atque anima temperatum. Quodsi ignis ex sese ipse animal est, nulla se alia admiscente natura, quoniam is, quum inest in corporibus nostris, efficit ut sentiamus, non potest ipse esse sine sensu.

(*d*) Quid Medeæ respondebis, quæ duobus avis, Sole et Oceano, Aeeta patre, matre Idyria procreata est? Quid hujus Absyrto fratri? Qui si di non sunt, vereor, quid agat Ino, hæc enim omnia ex eodem fonte fluxerunt. An Amphiaraus erit deus et Trophonius? Nostri quidem *publicani* quum essent agri in Boeotia *deorum* immortalium *excepti* lege *censoria*, negabant immortales esse ullos qui aliquando homines fuissent.

(*e*) Cur igitur duo *Scipiones*, fortissimos et optimos viros in Hispania Poenus oppressit? Cur *Maximus* extulit *filium consularem?* Cur *Marcellum* Hannibal interemit? Cur *Paullum* Cannæ sustulerunt?

3. (*a*) Give the derivation and the genuine Latin word in place of—coryphæus, clepere, atomus. 10

(*b*) Explain—id præcise dicitur; mediterranei.

(*c*) Translate—

Can a sensible man imagine all the constellations which are so great an ornament of the heavens, might possibly have originated from an accidental concourse of atoms roaming about quite at random? Or can they be the work of a being destitute of mental power?

TUESDAY, 8TH NOVEMBER.

[10 A.M. TO 1 P.M.]

HEBREW—PAPER I.

JOSEPH EZEKIEL, ESQ.

[The figures to the right indicate full marks.]

1. (*a*) Give the different senses in which the verb נָתַן is applied. 9

(*b*) Give the foreign words and phrases that occur in Genesis.

(*c*) Quote the first two poetical pieces in Genesis, stating the incidents they describe.

2. Translate the following passage into English :— 25

וְהָרָעָב כָּבֵד בָּאָרֶץ : וַיְהִי כַּאֲשֶׁר כִּלּוּ לֶאֱכֹל
אֶת־הַשֶּׁבֶר אֲשֶׁר הֵבִיאוּ מִמִּצְרָיִם וַיֹּאמֶר
אֲלֵיהֶם אֲבִיהֶם שֻׁבוּ שִׁבְרוּ לָנוּ מְעַט אֹכֶל :
וַיֹּאמֶר אֵלָיו יְהוּדָה לֵאמֹר הָעֵד הֵעִד בָּנוּ
הָאִישׁ לֵאמֹר לֹא תִרְאוּ פָנַי בִּלְתִּי אֲחִיכֶם
אִתְּכֶם : אִם יֶשְׁךָ מְשַׁלֵּחַ אֶת אָחִינוּ אִתָּנוּ
נֵרְדָה וְנִשְׁבְּרָה לְךָ אֹכֶל : וְאִם אֵינְךָ מְשַׁלֵּחַ
לֹא נֵרֵד כִּי הָאִישׁ אָמַר אֵלֵינוּ לֹא תִרְאוּ פָנַי
בִּלְתִּי אֲחִיכֶם אִתְּכֶם : וַיֹּאמֶר יִשְׂרָאֵל לָמָּה
הֲרֵעֹתֶם לִי לְהַגִּיד לָאִישׁ הַעוֹד לָכֶם אָח :
וַיֹּאמְרוּ שָׁאוֹל שָׁאַל הָאִישׁ לָנוּ וּלְמוֹלַדְתֵּנוּ
לֵאמֹר הַעוֹד אֲבִיכֶם חַי הֲיֵשׁ לָכֶם אָח וַנַּגֶּד לוֹ
עַל פִּי הַדְּבָרִים הָאֵלֶּה הֲיָדוֹעַ נֵדַע כִּי יֹאמַר

הוֹרִידוּ אֶת אֲחִיכֶם : וַיֹּאמֶר יְהוּדָה אֶל
יִשְׂרָאֵל אָבִיו שִׁלְחָה הַנַּעַר אִתִּי וְנָקוּמָה
וְנֵלֵכָה וְנִחְיֶה וְלֹא נָמוּת גַּם אֲנַחְנוּ גַּם אַתָּה
גַּם טַפֵּנוּ : אָנֹכִי אֶעֶרְבֶּנּוּ מִיָּדִי תְּבַקְשֶׁנּוּ אִם
לֹא הֲבִיאֹתִיו אֵלֶיךָ וְהִצַּגְתִּיו לְפָנֶיךָ וְחָטָאתִי
לְךָ כָּל הַיָּמִים : כִּי לוּלֵא הִתְמַהְמָהְנוּ כִּי
עַתָּה שַׁבְנוּ זֶה פַּעֲמָיִם : וַיֹּאמֶר אֲלֵיהֶם
יִשְׂרָאֵל אֲבִיהֶם אִם כֵּן אֵפוֹא זֹאת עֲשׂוּ קְחוּ
מִזִּמְרַת הָאָרֶץ בִּכְלֵיכֶם וְהוֹרִידוּ לָאִישׁ מִנְחָה
מְעַט צֳרִי וּמְעַט דְּבַשׁ נְכֹאת וָלֹט בָּטְנִים
וּשְׁקֵדִים :

3. (*a*) Give the etymology of the words בָּטְנִים and שְׁקֵדִים 6

(*b*) Give the masculine and feminine singular imperative of the verb הָיָה.

4. Translate the following verses into English :— 6

(*a*) בְּסֹדָם אַל תָּבֹא נַפְשִׁי בִּקְהָלָם אַל תֵּחַד
כְּבֹדִי כִּי בְּאַפָּם הָרְגוּ אִישׁ וּבִרְצֹנָם
עִקְּרוּ שׁוֹר : ◘

(*b*) בֶּן פֹּרַת יוֹסֵף בֶּן פֹּרַת עֲלֵי עָיִן בָּנוֹת
צָעֲדָה עֲלֵי שׁוּר :

5. (*a*) Explain the allusion in the first verse, and give its different renderings. 6

(*b*) What grammatical inconsistency do you find in the second; and how do you reconcile it?

6. Translate the following passage into English :— 20

וּבֹעַז עָלָה הַשַּׁעַר וַיֵּשֶׁב שָׁם וְהִנֵּה הַגּוֹאֵל
עֹבֵר אֲשֶׁר דִּבֵּר בֹּעַז וַיֹּאמֶר סוּרָה שְׁבָה פֹּה
פְּלֹנִי אַלְמֹנִי וַיָּסַר וַיֵּשֶׁב : וַיִּקַּח עֲשָׂרָה
אֲנָשִׁים מִזִּקְנֵי הָעִיר וַיֹּאמֶר שְׁבוּ פֹה וַיֵּשֵׁבוּ :
וַיֹּאמֶר לַגֹּאֵל חֶלְקַת הַשָּׂדֶה אֲשֶׁר לְאָחִינוּ
לֶאֱלִימֶלֶךְ מָכְרָה נָעֳמִי הַשָּׁבָה מִשְּׂדֵי מוֹאָב :
וַאֲנִי אָמַרְתִּי אֶגְלֶה אָזְנְךָ לֵאמֹר קְנֵה נֶגֶד
הַיֹּשְׁבִים וְנֶגֶד זִקְנֵי עַמִּי אִם תִּגְאַל גְּאָל וְאִם
לֹא יִגְאַל הַגִּידָה לִי וְאֵדְעָ כִּי אֵין זוּלָתְךָ לִגְאוֹל
וְאָנֹכִי אַחֲרֶיךָ וַיֹּאמֶר אָנֹכִי אֶגְאָל : וַיֹּאמֶר
בֹּעַז בְּיוֹם קְנוֹתְךָ הַשָּׂדֶה מִיַּד נָעֳמִי וּמֵאֵת
רוּת הַמּוֹאֲבִיָּה אֵשֶׁת הַמֵּת קָנִיתִי לְהָקִים
שֵׁם הַמֵּת עַל נַחֲלָתוֹ : וַיֹּאמֶר הַגֹּאֵל לֹא
אוּכַל לִגְאוֹל לִי פֶּן אַשְׁחִית אֶת נַחֲלָתִי גְּאַל
לְךָ אַתָּה אֶת גְּאֻלָּתִי כִּי לֹא אוּכַל לִגְאוֹל :

7. (*a*) Correct all the orthographical errors in the above passage. 6

(*b*) When is the incident mentioned in the Book of Ruth supposed to have taken place?

8. (*a*) Give in Hebrew the following terms of relationship :— 6

Mother-in-law, *daughter-in-law*, *sister-in-law* (husband's brother's wife).

(*b*) Give with examples the different significations of the word גּוֹאֵל

9. Translate and explain the following phrases :— 8

(*a*) יָמִים אוֹ עֲשׂוֹר :

(*b*) פֶּרֶא אָדָם :

(*c*) אוּלַי אִבָּנֶה מִמֶּנָּה :

(*d*) כַּסְפֵּךְ הָיָה לְסִגִים :

(*e*) וַיְקַו לַעֲשׂוֹת עֲנָבִים וַיַּעַשׂ בְּאֻשִׁים :

10. Give the idiomatic Hebrew of the following phrases :— 8

(*a*) Be thou (mas.) a blessing.

(*b*) Be thou (fem.) the mother of thousands of millions.

(*c*) Thy people is my people, and thy God is my God.

(*d*) May the Lord recompense thy work.

(*e*) For thy salvation do I wait, O Lord.

TUESDAY, 8TH NOVEMBER.

[2 P.M. TO 5 P.M.]

HEBREW—PAPER II.

JOSEPH EZEKIEL, ESQ.

[The figures to the right indicate full marks.]

1. (*a*) Distinguish חָזוֹן, נְבוּאָה and מַשָּׂא 6

(*b*) What are the chief subjects treated in the prescribed portion of Isaiah?

2. Translate the following verses, and explain the context :— 8

(*a*) כִּי צַו לְצַו צַו לְצַו קַו לְקַו קַו לְקַו זְעֵיר שָׁם זְעֵיר שָׁם :

(b) וְשַׁמְתִּיהָ לְמוֹרַשׁ קִפֹּד וְאַגְמֵי מָיִם
וְטִאטֵאתִיהָ בְּמַטְאֲטֵא הַשְׁמֵד נְאֻם
יְיָ צְבָאוֹת :

3. Translate the following passage into English :— 20

בַּיּוֹם הַהוּא יִפְקֹד יְיָ בְּחַרְבּוֹ הַקָּשָׁה וְהַגְּדוֹלָה
וְהַחֲזָקָה עַל לִוְיָתָן נָחָשׁ בָּרִחַ וְעַל לִוְיָתָן נָחָשׁ
עֲקַלָּתוֹן וְהָרַג אֶת הַתַּנִּין אֲשֶׁר בַּיָּם : בַּיּוֹם
הַהוּא כֶּרֶם חֶמֶד עַנּוּ לָהּ : אֲנִי יְיָ נֹצְרָהּ
לְרְגָעִים אַשְׁקֶנָּה פֶּן יִפְקֹד עָלֶיהָ לַיְלָה וָיוֹם
אֶצֻּרֶנָּה : חֵמָה אֵין לִי מִי יִתְּנֵנִי שָׁמִיר שַׁיִת
בַּמִּלְחָמָה אֶפְשְׁעָה בָהּ אֶצִּיתֶנָּה יָחַד : אוֹ
יַחֲזֵק בְּמָעֻזִּי יַעֲשֶׂה שָׁלוֹם לִי שָׁלוֹם יַעֲשֶׂה לִי :
הַבָּאִים יַשְׁרֵשׁ יַעֲקֹב יָצִיץ וּפָרַח יִשְׂרָאֵל
וּמָלְאוּ פְּנֵי תֵבֵל תְּנוּבָה : הַכְּמַכַּת מַכֵּהוּ
הִכָּהוּ אִם כְּהֶרֶג הֲרֻגָיו הֹרָג : בְּסַאסְאָה
בְּשַׁלְּחָהּ תְּרִיבֶנָּה הָגָה בְּרוּחוֹ הַקָּשָׁה בְּיוֹם
קָדִים : לָכֵן בְּזֹאת יְכֻפַּר עֲוֹן יַעֲקֹב וְזֶה כָּל
פְּרִי הָסֵר חַטָּאתוֹ בְּשׂוּמוֹ כָּל אַבְנֵי מִזְבֵּחַ
כְּאַבְנֵי גִר מְנֻפָּצוֹת לֹא יָקֻמוּ אֲשֵׁרִים וְחַמָּנִים :

4. (a) Comment upon the style of the above passage. 4

(b) To whom are the emblematic names in the above passage given?

5. (a) Quote the passage in Isaiah that supports the doctrine of resurrection, 4

(*b*) Give the modern names of *Elam*, Pathros, Cush, and Thinar.

6. (*a*) Who were Mahar-shalal-hash-baz and Thear Jashub? What do these names literally signify? What events did they foreshow? 6

(*b*) Give in short the life of Isaiah or Hezekiah.

(*c*) Give with date some account of Sennachrib's invasion of the kingdom of Judah.

7. Give the renderings of the following passage according to the authorized, Vulgate, and Syriac versions:— 6

כִּי כָל סֵאוֹן סְאֵן בְּרַעַשׁ וְשִׂמְלָה מְגוֹלָלָה
בְּדָמִים וְהָיְתָה לִשְׂרֵפָה מַאֲכֹלֶת אֵשׁ :

8. Analyse the following words, giving the prefixes, affixes, and the roots with their significations:— 8

בַּסַּנְוֵרִים, מִגְדָּנוֹת, מַטְעַמִּים, אַמְתְּחוֹת,
תַּאֲמִינוּ, תַּשְׁמִאִילוּ, מַעֲשַׂקוֹת, מְדֻרָתָהּ :

9. Give the Hebrew of *seedtime, harvest, summer, winter, ploughshares, pruning-hooks, head side of the bed, foot side of the bed;* and the English of 8

הָעֲנָסִים, הַשְּׁבִיסִים, הַשַּׁהֲרוּרִים, הַנִּטְפוֹת,
הַשֵּׁרוֹת, הָרְעָלוֹת, הַגְּלִינִים, הַסְּדִינִים :

10. (*a*) Translate the following passage into Hebrew:— 30

And in that day thou shalt say: O Lord, I will praise thee: though thou wast angry with me, thine anger is turned away, and thou comfortedst me. Behold, God is my salvation; I will trust, and not be afraid: for the Lord Jehovah is my strength and my song; he also is become my salvation. Therefore with joy shall ye draw water out of the wells of salvation. And in that day shall ye say, praise the Lord, call upon his name, declare his doings among the people, make mention that his name is exalted. Sing unto the Lord, for he hath done excellent things that is known in all the earth. Cry out and shout, thou inhabitant of Zion: for great is the Holy one of Israel in the midst of thee.

(*b*) Gad, a troop shall overcome him; but he shall overcome at the last. Out of Asher his bread shall be fat, and he shall yield royal dainties. Naphtali is a hind let loose: he giveth goodly words.

TUESDAY, 8TH NOVEMBER.

[10 A.M. TO 1 P.M.]

PERSIAN—PAPER I.

MIRZA M. COWSER, ESQ. ; JAMSETJI PALANJI KAPADIA, ESQ.

[The figures to the right indicate full marks.]

FERESHTAH ; THE LIFE OF BABAR.

1. Translate the following verse quoted in Fereshtah and name its author :— 3

درخت دوستی بنشان که کام دل بیار آرد
نهال دشمنی برکن که رنج بیشمار آرد

2. Derive or analyse ماوراء انهر give its meaning, and also of— 9

هد هد خوشخبر—جیحون—منهزم—منهدم

3. Why is سمرقند written بلدهٔ محفوظهٔ سمرقند ? 5

4. Give idiomatic English words for— 10

حصاری شدن—ملکی و مالی—محاصره—
تسخیر کردن—نشیب و فراز—چون وچرا—
معسکر—برج وباره—امراض متضاده—
مصاف دادن

5. Express— 4

(a) They rebelled.

(b) Two hundred horses died.

(c) Twenty soldiers perished before the army reached the fortress.

(d) They pursued them to many miles.

6 Write two meanings for each of the following words — 9

ادب کردن — مِهر — مدام — نام زد کردن — مردم — بط

7 Translate into English— 5

(a) روزکار ابواب تفرقه بر روی روزکار او کشود

(b) فردوس مکانی آنرا مقدمه فتوح دنسته روان شد

(c) ست و سبعین و تسعمایه

(d) وصول موکب با بری را فوز عظیم دانست

(e) در فضیلت و ندیمی بی عدیل و نظیر بود

8. Translate into English— 30

و محمد زمان میرزا ولد بدیع الزمان میرزا را که از بلخ کریخته بدرگاه آمده بود حاکم آگره کردانیده خود در پنجم ماه محرم سنه خمس و ثلثین و تسعمایه بجانب گوالیار سواری فرمود وقلعه گوالیار و فیل سنگی و عمارت بکرماجیت و راجه مانسنکه راکه در ان حصار است تفرج نموده بسیر باغ و حوض رحیم داد رفت و در آن جا گل سرخ آتشین که کمتر بنظر در آمده بود بنظر در آمد حکم

فرمود که نهال آنرا باً کره برده بنشانند
چه که اکثر آن گل برنک شفتالو میباشد و
سرخ آتشین آن کمتر بهم میرسد وهمچنین
مسجد جامع سلطان شمس الدین التمش را
که در گوالیار است تماشا کرده بکرات و
مرات فاتحهٔ امرزش او خوانده بدار الخلافه
آگره عود فرمود و دررساله واقعات بابری
مرقوم کشته که بیست و سویم ماه صفر این
سال حرارتی دربدن من ظاهر شد انچنانکه
نماز جمعه را در مسجد به تشویش گزاردم
و پس فردای آن روز یک شنبه اندک تپ
لرزه کردم و در اینوقت بنظم کردن رساله
و لدیه خواجه عبدالله احرار مشغول شدم
و بخاطر کذرا نیدم که اگر این منظومهه مقبول
آنحضرت افتد از این مرض نجات خواهم
یافت چنانچه شخصی قصیده برده مقبول
افتاد و قائل وی ازعلت افلیج خلاص گشت
پس آن رساله را دروزن رمل مسدس مخبون
که سبحهٔ مولا نا جامی بان وزن است
با ختتام رسانیدم

9. Translate into Persian— 35

A Persian ambassador at Constantinople, being asked by the Sultan which he thought the most delightful spot in the world, answered, without hesitation, "my own house, please Your Majesty." "Your own house!" repeated the monarch. "Yes" said the ambassador, "My own house. Your Majesty will, no doubt, readily allow, as all learned men have done, that the fourth climate is the most delightful in the world. It is equally generally admitted that Irak surpasses all regions in the fourth climate. Isphahán is, beyond dispute, the pleasantest place in Iran; and every Persian knows that Abbas-ábád is superior to all other parts of Isphahán; and my house is beyond compare the best in Abbas-ábád!"

TUESDAY, 8TH NOVEMBER.

[2 P.M. TO 5 P.M.]

PERSIAN—PAPER II.

MIRZA M. COWSER, ESQ.; JAMSETJI PALANJI KAPADIA, ESQ.

Háfez Odes C.—CL.

1. Write a couplet in each of the following metres — 10

رجز — هزج

2 What are the literal and figurative meanings of— 6

پسته — بادام — نرگس — سنبل — سرو — شمشاد

3. Translate the couplet— 20

تا نفخت فیه من روحی شنیدم شد یقین
بر من این معنی که مازان وئیم اوزان ماست

and explain fully what you understand from فیه من روحی نفخت describing the event therein alluded.

4. Scan— 6

از دید خون دل همه بر روی ما رود
بر روی ما ز دیده ندانم چها رود

5 Give the corresponding terms for— 18

(a) 1st person, 2nd person; 3rd person; Prose; Catalictic; Hexameter.

(b) مبتدا—خبر—مثمن—ضمیر—ظرف—صفت

Point out also the literal meaning of the above Arabic terms

6 Give a brief account of the life of Háfez. 10

7 Translate into English— 30

(a) ابر آزاری بر آمد باد نو روزی وزید
وجه می می خواهم ومطرب که میگوید رسید
شاهدان در جلوه و من شرمسار کیسه ام
ای فلک این شرمساری تابکی باید کشید
قحط جود است آبروی خود نمی باید فروخت
باده و گل از بهای خرقه میباید خرید
این لطافت کز لب لعل تو من گفتم که گفت
وین تطاول کز سر زلف تو من دیدم که دید

(b) بیا که ترک فلک خوان روزه غارت کرد
هلال عید بدور قدح اشارت کرد
ثواب روزه و حج قبول آنکس برد
که خاک میکده عشق را زیارت کرد
مقام اصلی ما گوشه خرابات است
خدایش خیر دهاد آنکه این عمارت کرد

نماز در خم آن ابروان محرابی
کسی کند که بخون جگر طهارت کرد
امام شهر که سجّاده میکشید بدوش
بخون دختر رز جامه را قصارت کرد
فغان که نرگس چماش شیخ شهر امروز
نظر بدرد کشان از سر حقارت کرد
حدیث عشق ز حافظ شنو نه از واعظ
اگر چه صنعت بسیار در عبارت کرد

بحسن و خلق و وفا کس بیار ما نرسد (c)
ترا درین سخن انکار کار ما نرسد
هزار نقش بر آید ز کلک صنع و یکی
بدلپذیری نقش و نگار ما نرسد

بتی دارم که گل ز سنبل سایه بان دارد
بهار عارضش خطی بخون ارغوان دارد
خدایا داد من بستان ازوای شحنهٔ مجلس
که می با دیگران خورد است و با من سرگران دارد

صالح و طالح مطاع خویش نمودند
تا که قبول افتد و چه در نظر آید

WEDNESDAY, 9TH NOVEMBER.

[10 A.M. TO 1 P.M.]

TRIGONOMETRY.

J. T. HATHORNTHWAITE, M.A.; T. S. TAIT, M.A., B.Sc.;
The Rev. C. F. H. JOHNSTON, M.A.;
FARDUNJI MANCHERJI DASTUR, M.A.

[The figures to the right indicate full marks.]

1. Show how to compare the numbers which measure the same angle in the English and French methods. 5

The same angle when expressed in English minutes is $m - n$, and when expressed in French minutes is $m + n$, find the ratio of m to n.

2. Prove that for angles of any magnitude— 8

$$\tan \theta = \tan (\pi + \theta).$$

Given $\tan \theta = \frac{5}{12}$, find the other trigonometrical functions of θ.

3. Transform the formula— 9

$$\tan (A + B) = \frac{\tan A + \tan B}{1 - \tan A \tan B.}$$

into inverse notation.

Show that $\tan^{-1} \frac{1}{7} + 2 \tan^{-1} \frac{1}{3} = \frac{\pi}{4}$.

4. Find the sine of the sum of two angles in terms of the sines and cosines of the angles, each angle being less than a right angle, and their sum being greater than a right angle. 12

Given $\sin 5 A \cos 3 A = \sin 9 A \cos 7 A$, find A.

5. Find by Euclid IV. 10 the value of $\sin 18°$. 8

6. Define the logarithm of a number to any given base a; find prove that— 10

$$\log_a n^r = r \times \log_a n.$$

Having given $\log_{10} 2 = \cdot 3010300$ and $\log_{10} 3 = \cdot 4771213$; find $\log_{10} 50 \cdot 625$.

7. Having given in any triangle $c^2 = b^2 + a^2 - 2ab \cos C$, and $2s = a + b + c$, find the values of $\sin A$ and $\cos \frac{A}{2}$ in terms of the sides, giving the proper signs to any radicals that occur. 12

8. The side BC of a triangle is bisected in D; prove that— 12

$$2\,AD.\,BC = \sqrt{b^4 + c^4 - 2b^2c^2 \cos 2A}.$$

9. The sides of a triangle are $a - d$, a, $a + d$, and its area is $\frac{3\sqrt{3}}{20} a^2$; find its greatest angle. 12

10. Find the radius of the circle described round a triangle in terms of its sides; and if this be represented by R show that— 12

$$a \cos A + b \cos B + c \cos C = 4\,R \sin A \sin B \sin C.$$

WEDNESDAY, 9TH NOVEMBER.

[2 P.M. TO 5 P.M.]

STATICS.

J. T. HATHORNTHWAITE, M.A.; T. S. TAIT, M.A., B.Sc.;
The Rev. C. F. H. JOHNSTON, M.A.;
FARDUNJI MANCHERJI DASTUR, M.A.

[The figures to the right indicate full marks.]

1. Define *uniform density*, *variable density*, and show how to compare the densities of two substances of uniform density. 10

Three bodies A, B, C, whose volumes are as 3 : 4 : 5 are in weight as 1 : 2 : 3; compare their densities.

2. Enunciate and prove the proposition known as the *Polygon of Forces*. Is its converse true? If such a system of forces act in one plane but not at a point, what relation holds among them? 10

3. Prove that a system of forces acting in one plane on a rigid body will be in equilibrium, if the algebraical sum of the forces resolved parallel to two fixed straight lines in the plane vanishes and the algebraical sum of the moments round any point in the plane also vanishes. 8

4. Three forces whose directions bisect the angles of a triangle are in equilibrium; show that they are proportional to the cosines of the respective semi-angles. 6

5. Show that the algebraical sum of the moments of two forces round any point in the plane is equal to the moment of their resultant. 10

Two or more forces act in one plane on a particle; prove that the algebraical sum of their moments round a point in the plane remains unchanged when the point moves parallel to a certain straight line.

6. Investigate the conditions of equilibrium of a heavy body placed upon a horizontal plane. 18

A frustum is cut from a cone by a plane bisecting the axis and parallel to the base; show that it will rest with its slant side on a horizontal plane if the height of the cone bear to the diameter of its base a greater ratio than $\sqrt{7}$ to $\sqrt{17}$.

7. Investigate the conditions that a common balance may possess great sensibility and great stability. 10

8. Describe the *wheel and axle*, and find the relation of the power to the weight when there is equilibrium, the thickness of the ropes being taken into account. 6

9. If a weight W be kept from sliding down an inclined plane of inclination a, by a string which is parallel to the plane and which passes round a wheel of radius r, find the weight which must hang from an axle of radius r, having a common axis with the wheel, that there may be equilibrium. 10

10. State the *Laws of Friction.* 12

Upon an inclined plane whose inclination is $\frac{\pi}{4}$ the greatest horizontal force required for sustaining a weight is to the least in the ratio of 9 to 4; find the co-efficient of friction.

IV.

EXAMINATION FOR THE DEGREE OF BACHELOR OF ARTS.

EXAMINERS.

F. G. SELBY, B.A.	In English.
H. LITTLEDALE, B.A.	
RAMKRISHNA GOPAL BHANDARKAR, M.A.	In Sanskrit.
YASHVANT VASUDEV ATHALE, M.A., LL.B.	
A. BARRETT, B.A.	In Latin.
The Rev. F. C. HARZHEIM, S.J. ..	
MIRZA M. COWSER, Esq.	In Persian.
JAMSETJI PALANJI KAPADIA, Esq. ...	
S. NEWCOME FOX, B.A.	In History and Political Economy; and Logic and Moral Philosophy.
M. MACMILLAN, B.A.	
J. T. HATHORNTHWAITE, M.A. ..	In Mathematics.
T. S. TAIT, M.A., B.Sc.	
The Rev. C. F. H. JOHNSTON, M.A.	
FARDUNJI MANCHERJI DASTUR, M.A.	
The Rev. D. MACKICHAN, M.A., B.D.	In Elementary Physics.
The Rev. F. DRECKMANN, S.J. ...	
I. B. LYON, F.C.S.	In Chemistry.
S. COOKE, M.A....	
SAKHARAM ARJUN RAVUT, L.M. ...	In Vegetable Anatomy and Physiology and Systematic Botany.
J. MACGREGOR, M.D.	
H. COOK, M.D.	In Comparative Anatomy and Physiology.
G. A. MACONACHIE, M.D., C.M. ...	

MONDAY, 28TH NOVEMBER.

[10 A.M. TO 1 P.M.]

ENGLISH—PAPER I.

F. G. SELBY, B.A. ; H. LITTLEDALE, B.A

Milton, Paradise Lost I., II.; Burke, Select Works, 2 vols.

1. Paraphrase :—

Here Nature first begins
Her farthest verge, and chaos to retire,
As from her outmost works, a broken foe,
With tumult less, and with less hostile din ;
That Satan with less toil, and now with ease,
Wafts on the calmer wave by dubious light,
And, like a weather-beaten vessel, holds
Gladly the port, though shrouds and tackle torn ;
Or in the emptier waste, resembling air,
Weighs his spread wings, at leisure to behold
Far off the empyreal Heaven, extended wide
In circuit, undetermined square or round,
With opal towers and battlements adorned
Of living sapphire, once his native seat,
And fast by, hanging in a golden chain,
This pendant world, in bigness as a star
Of smallest magnitude close by the moon.

2. (*a*) "Nine times the space that measures day and night To mortal men" : *why does he not say "Nine days and nights"?* (*b*) "As far removed from God and light of Heaven As from the centre thrice to the utmost pole." *Illustrate these relative distances by a diagram showing Milton's conception of the universe.* (*c*) "As is an organ, from one blast of wind, To many a row of pipes the soundboard breathes." *What is the rest of this simile?* (*d*) "From morn To noon he fell, from noon to dewy eve." *Who is referred to?* (*e*) "With this advantage, then, To union and firm faith and firm accord, More than can be in Heaven." *What "advantage"?* (*f*) "Over the vast Abrupt, ere he arrives the happy Isle." *Discuss the various interpretations of "Isle" here.* (*g*) "A gulf profound as that Serbonian bog." *Explain; and state in what two connections Burke quotes this phrase.* (*h*) "Far off at sea a fleet descried Hangs in the clouds." *What is this phenomenon called?* (*i*) "Fierce as ten Furies." *Why does Hallam call this "a wretched hemistich"?* (*j*) "These were the prime in order and in might." *Enumerate them.*

3. What did Burke mean to establish, to mark, and to acknowledge, by his Six Resolutions?

4. What, according to Burke, are the proper limits of the influence of speculative minds on public affairs?

5. Show how far (i) Burke's estimate of the French Revolution, and (ii) his predictions of its consequences, were justified by the course of events in France after 1790.

6. Paraphrase so as to show clearly that you understand:—

(*a*) Pigging together, heads and points, in the same truckle-bed.

(*b*) The civil list revenues were then mortgaged for the sum to be raised, and stood charged with the ransom of their own deliverance.

(*c*) Their odium might become, strained through the medium of two or three constructions, the means of sitting as the trustee of all that was dear to them.

(*d*) A mitigated but spirited nobility, to lead your virtue, not to overlay it.

(*e*) Regicide, and parricide, and sacrilege, are but fictions of superstition, corrupting jurisprudence by destroying its simplicity.

(*f*) Just as the magistrates begin to learn their trade, like chimney-sweepers, they are disqualified for exercising it.

(*g*) They have reversed the Latonian kindness to the landed property of Delos.

7. Give the meanings of:—their pounces, fly-blown, mumping, the drawback, maroon, proxy, a purchase, the checquer, gabelles, tontines.

8. Write notes on:—a Roman charity, the previous question, lord of the ascendant, the fixed air, the two great recognised species, Circean liberty, the doctrine of prescription, the distempered instinct of a jackdaw, my grand climateric, the hermetic art.

9. Explain the allusions in—

(*a*) the general epistle to the Americans.
(*b*) a sort of *Rota* in the court.
(*c*) the Pisgah of his Pulpit.
(*d*) the mode of inquisition and dragooning.
(*e*) it is the Corinthian capital of polished society.
(*f*) the only language that rarely lies.

Note.—In translating into English prose, candidates are directed to give a *close*, and, at the same time, an *idiomatic* rendering. No merit will be assigned to a loose paraphrase that evades the difficulties of expression or meaning in the original.

MONDAY, 28TH NOVEMBER.

[2 P.M. TO 5 P.M.]

ENGLISH—PAPER II.

F. G. SELBY, B.A.; H. LITTLEDALE, B.A.

Antony and Cleopatra and the Golden Treasury.

1. Contrast the characters of Octavia and Cleopatra, and of Antony and Cæsar, and mention any other effective contrasts, whether of character or situation, that you have noticed in the play.

2. Explain, as precisely as you can, the attitude of Shelley and Wordsworth towards Nature; and compare the two poets in respect of the *definiteness* and *practical value* of the lessons which they have drawn from the study of Nature.

3. Explain, in connection with the ode in which it occurs—

Our birth is but a sleep and a forgetting;
The soul that rises with us, our life's star,
Hath had elsewhere its setting
And cometh from afar;
Not in entire forgetfulness,
And not in utter nakedness,
But trailing clouds of glory do we come
From God, who is our home:
Heaven lies about us in our infancy!
Shades of the prison-house begin to close
Upon the growing boy,
But he beholds the light, and whence it flows,
He sees it in his joy;
The youth, who daily farther from the east
Must travel, still is Nature's priest,
And by the vision splendid
Is on his way attended;
At length the man perceives it die away,
And fade into the light of common day.

4. Translate into English prose—

(*a*) He is gone on the mountain
He is lost to the forest,
Like a summer-dried fountain,
When our need was the sorest.
The fount re-appearing
From the rain-drops shall borrow,
But to us comes no cheering,
To Duncan no morrow!
The hand of the reaper

Takes the ears that are hoary,
But the voice of the weeper
Wails manhood in glory.
The autumn winds rushing
Waft the leaves that are serest,
But our flower was in flushing
When blighting was nearest.
Fleet foot on the correi,
Safe counsel in cumber,
Red hand in the foray,
How sound is thy slumber!
Like the dew on the mountain,
Like the foam on the river,
Like the bubble on the fountain,
Thou art gone; and for ever!

(b) *Ant.*—Nay, nay, Octavia, not only that,—
That were excusable, that, and thousands more
Of semblable import—but he hath wag'd
New wars 'gainst Pompey; made his will, and read it
To public ear:
Spoke scantly of me: when perforce he could not
But pay me terms of honour, cold and sickly
He vented them; most narrow measure lent me;
When the best hint was given, he not took 't,
Or did it from his teeth.

Octa.—Oh! my good lord,
Believe not all: or, if you must believe,
Stomach not all. A more unhappy lady,
If this division chance, ne'er stood between,
Praying for both parts:
The good gods will mock me presently,
When I shall pray, "O bless my lord and husband!"
Undo that prayer, by crying out as loud,
"O bless my brother"! Husband win, win brother,
Prays, and destroys the prayer; no midway
'Twixt there extremes at all.

5. Give the etymology of the following words:—generous, wassail, adieu, medicine, vanguard, don, doff; and explain the following forms:—fled, did, made, ran, wrought, none, wont.

N.B.—In translating into English prose, students are directed to give a *close* and, at the same time, an *idiomatic* rendering. No merit will be assigned to a loose paraphrase that evades the difficulties of expression and meaning in the original.

TUESDAY, 29TH NOVEMBER.

[10 A.M. TO 1 P.M.]

SANSKRIT—PAPER I.

RAMKRISHNA GOPAL BHANDARKAR, M.A. ;
YASHVANT VASUDEV ATHALE, M.A., LL.B.

[The figures to the right indicate full marks.]

1. Translate closely the following :— 8

(*a*) अहो प्रमादः
प्रकृतिललितमेतत्सौकुमार्यैकसारं
वपुरयमपि सत्यं दारुणः पञ्चबाणः ।
चलितमलयवातोद्धूतचूतप्रसूनः
कथमयमपि कालश्चारुचन्द्रावतंसः ॥

(*b*) कुमुदाकरेण शरदिन्दुचन्द्रिका
यदि रामणीयकगुणाय संगता ।
सुकृतं तदस्तु कतमस्त्वयं विधि-
र्यदकालमेघवितति र्व्ययूयुजत् ॥

2. Explain and give the context of the following :— 15

(*a*) महाभाग सुश्लिष्टगुणतया रमणीय एषवः
सुमनसां संनिवेशः कुतूहलिनीच नो भर्तृदा-
रिका वर्तते तस्या अभिनवो विचित्रः कुसुमे-
षुव्यापारस्तत्समासादयतु सरसएष भर्तृदा-
रिकायाः कण्ठावलम्बनमहार्घताम् ।

(*b*) त्वमपि स्वभावेनैव तस्मिन्नवसरेसंगीतकं
नार्तितासि.

(c) साधु संप्रति मया तटस्थयैव मालतीप्रति निसृष्टार्थदूतीवृत्तस्य लघूकृतो भारः

(d) अन्यएवाक्षुण्णः कथाप्रकारो भगवत्याः

(e) अशस्त्रपूतं निर्व्याज पुरुषाङ्गोपकल्पितम्। विक्रीयते महामांसं गृह्यता गृह्यतामिदम्॥

(f) महानुभाव हृदयेप्यप्रतिहतस्वयंग्राहसाहसोऽयंजनः किमिदानीं कङ्कणाभरणं करं विचारयति.

3 State what उपक्षेप, प्राकृतसमक and अङ्कावतार are, and give an instance of each from the Málatí-Mádhava 5

4 (a) Give the plot of the Málatí-Mádhava, taking care to omit none of the *dramatis personæ*, and to delineate in full the character of Kámandakí 12

(b) What observations occur to you in regard to the arrangement of incidents in the drama?

(c) Are there any parts of the plot which appear to be adaptations from other poets? If there are any, state which

5 Explain fully— 11

(a) मध्ये च तस्यातिग्रहतः शबरसैन्यस्य प्रथमे वयसि वर्तमानमेकलव्यमिव जन्मान्तरगतं कैश्चिच्छिशुभिरिव काकपक्षधरैः शबरवृन्दैः परिगतं बकराक्षसमिव गृहीतैकचक्रं भीष्ममिवाशिखण्डिशत्रुं विद्याधरमिव मानसवेगं पराशरमिव योजनगन्धानुसारिणमभिनवयौवनमपि क्षपितबहुवयसं कृष्णमप्यसुदर्शनमातङ्गकनामानं शबरसेनापतिमपश्यम्.

(*b*) तत्तनयश्च हारीतनामा तापसकुमारको द्रौणिरिव कृपानुगतो घर्मकालदिवसइव क्षपितबहुदोषः सुराजेव निगूढमन्त्रसाधनक्षपित विग्रहो वनचरोऽपि कृतमहालयप्रवेशो संयतोऽपि मोक्षार्थी सामप्रयोगपरोऽपि सततावलम्बितदण्डः सुप्तोऽपि प्रबुद्धः संनिहितनेत्रद्वयोऽपि परित्यक्तवामलोचनस्तदेव कमलसरःसिस्नासुरुपागमत्.

6 Translate— 10

यत्रच दशरथवचनमनुपालयन्नुत्सृष्टराज्यो रामः पञ्चवट्यां कंचित्कालं सुखमुवास। चिरशून्येद्यापि यत्र शाखानिलीननिभृतपाण्डुकपोतपङ्क्तयो लग्नतापसाग्निहोत्रधूमराजय इव लक्ष्यन्ते तरवः।यत्रच मैथिलीवियोगदुःखःदुःखितौ दशवदनपिशुनौ चन्द्रसूर्याविव कबन्धग्रस्तौ समं रामलक्ष्मणौ त्रिभुवनभयं महच्चक्रतुः। अत्यायतश्च यस्मिन्दशरथसुतशरनिपातिते .योजनबाहोर्बाहूरगस्त्यप्रसादनागतनहुषाजगरकाभशङ्कामकरोदृषिजनस्य.

Give briefly the legends herein referred to.

7 Name the various religious and popular observances which Vilásavatí is said to have gone through in her solicitude to secure the birth of a son. 5

8 What *alankáras* occur most frequently in the Kádambarí Give an example of each 6

9 Give the meanings of the following words, illustrating your answer in reference to the last four by an example of each .— 8

किंपुरुष, कुलशैल, अहमहमिका, पुर्णपात्र, विप्रश्निका, षष्ठीदेवी, आख्यानक, आख्यायिका, अक्षरच्युतक, बिन्दुमती, गूढचतुर्थपाद and प्रहेलिका.

10 Translate into English — 20

नन्वीश्वरसद्भावे किंप्रमाणं प्रत्यक्षमनुमानमागमोवा। न तावदत्र प्रत्यक्षं क्रमते रूपादिरहितत्वेनातीन्द्रियत्वात्। नाप्यनुमानं तद्व्याप्तिग्रहाद्यभावात्। नचाप्यागमः विकल्पासहत्वात्। तथाहि किमीश्वरात्संभूत आगम ईश्वरमवगमयति नित्योवा। आद्ये परस्पराश्रयापातः। द्वितीयेऽपसिद्धान्तापातः। उपमानमपि न प्रभवति नियतविषयत्वात्। तस्मादीश्वरः शशविषाणायत इति चेन्मैवम्। विवादास्पदं नगसागरादिकं सकर्तृक कार्यत्वात् कुम्भवदित्याद्यनुमानप्रमाणस्येश्वरसद्भावे समर्थत्वात्। नचात्र सकर्तृकत्वसाधकः कार्यत्वरूपोहेतुरसिद्ध इति वाच्यम्। विप्रतिपन्नं नगसागरादिकं कार्यं सावयवत्वात् कुम्भादिवदिति सावयवत्वहेतुकानुमानेन कार्यत्वस्यसुसाध्यत्वात्।

TUESDAY, 29TH NOVEMBER.

[2 P.M. TO 5 P.M.]

SANSKRIT—PAPER II.

RAMKRISHNA GOPAL BHANDARKAR, M A.;
YASHVANT VASUDEV ATHALE, M.A., LL.B.

[The figures to the right indicate full marks.]

1. (A) Translate into English— 12

(*a*) परा हि मे विमन्यवः पतन्ति वस्य इष्टये ।
वयो न वसतीरुप ॥

(*b*) वाश्रेव विद्युन्मिमाति वत्सं न माता सिषक्ति ।
यदेषां वृष्टिरसर्जि ॥
दिवा चित्तमः कृण्वन्ति पर्जन्येनोदवाहेन ।
यत्पृथिवीं व्युन्दन्ति ॥

(*c*) पृच्छे तदेनो वरुण दिदृक्षूपो एमि चिकितुषो विपृच्छेम् ।
समानमिन्मे कवयश्चिदाहुरयं ह तुभ्यं वरुणो हृणीते ॥

(*d*) यः सप्तरश्मिर्वृषभस्तुविष्मानवासृजत्सर्तवे सप्त सिन्धून्
यो रौहिणमस्फुरद्वज्रबाहुद्यामारोहन्तं स जनास इन्द्रः ॥

(*e*) अशोच्यग्निःसमिधानो अस्मे उपो अदृश्रन्त-
मसश्चिदन्ताः ।
अचेति केतुरुषसः पुरस्ताच्छ्रेमे दिवो दु-
हितुर्जायमानः ॥

(B) Make out a list of the archaic words, expressions, and grammatical forms occurring in (*b*) and (*c*); and also of such as are the same in the later or classical Sanskrit In the case of the archaic grammatical forms, explain them and give the corresponding ones in classical Sanskrit. 5

2. Explain fully— 7

(*a*) प्रजायेमहि रुद्र प्रजाभिः ।

(*b*) अव स्यूमेव चिन्वती मघोन्युषा याति ।

(*c*) विश्वा अपो अजयद्दासपत्नीः ।

(*d*) अजा अन्यस्य वह्नयो हरी अन्यस्य संभृता ।

(*e*) क्रत्वःसमह दीनता प्रतीपं जगमा शुचे ।

What gods are alluded to in (*d*)? Write notes on the words underlined

3 Explain the following words as used in the Rig Veda, giving the etymology .— 3

क्रन्दसी, असुर, गवाशिरं, अक्तु, स्वधावः, नू.

4 How is the infinitive formed in the Veda? Give instances What light does its formation throw on the etymology of the classical infinitive? Make out a list of the Vedic abstract nouns formed by adding अस् to the root, which occur in the portion of the Veda you have read. 4

5 (*a*) कामस्तदग्रे समवर्तताधि मनसो रेतः प्रथमं यदासीत । 4

(*b*) हत्वी दस्यून्प्रार्यंवर्णमावत् ।

Explain the idea involved in (*a*) and give the historical significance of (*b*). Quote from another hymn addressed to Indra a passage similar to (*b*).

6. What is तात्पर्यार्थ as distinguished from the direct or indirect senses of words? How is it brought out according to the views of the two schools of Mîmânsakas mentioned by Mammata. 4

7. Explain उपादानलक्षणा and लक्षणलक्षणा with instances. Is not आयुर्घृतम् an instance of the latter, and गङ्गायांघोषः of शुद्धा साध्यवसाना. Give reasons for your answer. 5

8. Explain, giving the context fully— 16

(*a*) न हि गौः स्वरूपेण गौर्नाप्यगौः । गोत्वाभिसंबन्धात्तु गौः ।

(*b*) लक्ष्यं न मुख्यं नाप्यत्र बाधो योगः फलेन नो ।
न प्रयोजनमेतस्मिन्न च शब्दः स्खलद्गतिः॥

(*c*) कलङ्कोऽक्षवलयामिवेति तूपमायां कलङ्कस्योत्कटतया प्रतिपत्तिः । नचास्यकरधृतत्वं तत्वतोऽस्तीति मुख्येऽप्युपचार एव शरणं स्यात् ।

(*d*) अपवादविषयपरिहारिणोत्सर्गस्य व्यवस्थितेः ।

9. What alankâras involve an identification of one *vâkyârtha* with another expressed or implied, and a *jnâpaka hetu* and a *kâraka hetu*. Explain by giving instances. 7

10 Distinguish between— 8

(*a*) भ्रान्तिमत् and अपह्नुति; (*b*) व्याजोक्ति, मीलित and सामान्य; (*c*) अपह्नुति and व्याजोक्ति.

Define these

11 What alankâras are involved in the following and why — 5

(*a*) पद्मावतीविमलवारिविशालसिन्धु-
पारासरित्परिकरच्छलतो बिभर्ति ।
उत्तुङ्गसौधसुरमन्दिरगोपुराट्ट-
संघट्टपाटितविमुक्तमिवान्तरिक्षम् ॥

(*b*) अमृतलहरीचन्द्रज्योत्स्नारमावदनाम्बुजा-
न्यधरितवतो निर्मर्यादप्रसादमहाम्बुधेः ।
उदभवदयं देव त्वत्तः कथं परमोल्बण-
प्रलयदहनज्वालाजालाकुलो महसां गणः ॥

12 Translate into Sanskrit — 20

Then we ought not to retaliate or render evil for evil to any one, whatever evil we may have suffered from him. But I would have you consider, Crito, whether you really mean what you are saying. For this opinion has never been held, and never will be held, by any considerable number of persons, and those who are agreed and those who are not agreed upon this point have no common ground, and can only despise one another when they see how widely they differ. Tell me, then, whether you agree with and assent to my first principle, that neither injury, nor retaliation, nor warding off evil by evil is ever right

TUESDAY, 29TH NOVEMBER.

[10 A.M. TO 1 P.M.]

LATIN—PAPER I.

A. BARRETT, B.A.; The Rev. F. C. HARZHEIM, S.J.

[The figures to the right indicate full marks.]

1. Translate— 7

(a) Vidimus flavum Tiberim retortis
Litore Etrusco violenter undis
Ire dejectum monumenta regis
Templaque Vestæ;
Iliæ dum se nimium querenti
Jactat ultorem, vagus et sinistra
Labitur ripa Jone non probante
Uxorius amnis.
Audiet cives acuisse ferrum
Quo graves Persæ melius perirent
Audiet pugnas vitio parentum
Rara juventus.

(b) Non opimæ
Sardiniæ segetes feraces,
Non æstuosæ grata Calabriæ
Armenta, non aurum aut ebur Indicum
Non rura, quæ Liris quieta
Mordet aqua taciturnus amnis.
Premant Calena falce quibus dedit
Fortuna vitem; dives et aureis
Mercator exsiccet culullis
Vina Syra reparata merce.

2. Translate and *annotate*— 10

(a) Nulli plura tamen dividit oscula
Quam dulci Lamiæ, memor
Actæ non alio rege puertiæ
Mutatæque simul togæ.
Cressa ne careat pulchra dies nota,
Neu promptæ modus amphoræ
Neu morem in Salium sit requies pedum.

(b) Tu frustra pius heu non ita creditum
Poscis Quintilium Deos.
Quod si Threicio blandius Orpheo
Auditam moderere arboribus fidem,
Non vanæ redeat sanguis imagini,
Quam virga semel horrida,

Non lenis precibus fata recludere,
Nigro compulerit Mercurius gregi.

(c) Fertur Prometheus, addere principi
Limo coactus particulam undique
Desectam, et insani leonis
Vim stomacho apposuisse nostro.

3. Annotate or explain— 15

"Nec regna vini sortiere talis"; "Me tabula sacer
votiva paries indicat uvida
Suspendisse potenti
Vestimenta maris Deo";
"Seriberis Vario fortis et hostium
Victor Mæonu carminis alite";
"Hunc equis, illum superare pugnis nobilem";
"Regulum et Scauros animæque magnæ
Prodigum Paullum"—;
"—Non tibi sunt integra lintea,
Non Di, quos iterum pressa voces malo."
"Vitabis æstus et fide Teia
Dices laborantes in uno
Penelopen vitreamque Circen."
"Impium
Lenite clamorem, sodales,
Et cubito remanete presso."
"Age dic Latinum
Barbite, carmen
Lesbio primum modulate civi."

4. Give the various meanings of "per" in composition, and mention any suffix or affix used by Horace for metrical purposes only, without apparent alteration of the meaning of the simple word. 7

5. What do you gather to have been Horace's opinion of the sea? Quote or refer to passages in illustration, and give several examples of the active use of adjectives ending in "bilis." 8

6. Give the etymology of—exilis; supplicium; munus; amœnus; femina; apricus; incolumis; contamino; incus; debilis; supellex sublimis; callidus; integer; exiguus; necessitas; mactare; examen; immanis; auriga; adminiculum; and account for the formation in "sivi" of the perfect of verbs like "lacesso." 15

7. Point out any metrical peculiarities in the following passages:— 10

(a) "Metu Deorum continuit? quibus
Pepercit aris?;"

(*b*) "Mentemque lymphatam Mareotico";

(*c*) "Perrupit Acheronta Herculeus labor";

(*d*) Thracio bacchante magis sub interlunia vento";

(*e*) "Neve te nostris vitiis iniquum
Ocyor aura";

(*f*) Mutare et insignem attenuat Deus."

8. Translate— 12

Ceterum magis constat, ratibus trajectos; id ut tutius consilium aute rem foret, ita, acta re, ad fidem pronius est. Ratem unam, ducentos longam pedes, quinquaginta latam, a terra in amnem porrexerunt: quam, ne secunda aqua deferretur, pluribus validis retinaculis parte superiore ripæ religatam, pontis in modum humo injecta constraverunt; ut belluæ audacter velut per solum ingrederentur. Altera ratis, æque lata, longa pedes centum, ad trajiciendum flumen apta, huic copulata est: et quum elephanti, per stabilem ratem, tanquam viam, pragredientibus feminis, acti, in minorem applicatam trangressi sunt; extemplo resolutis, quibus leviter annexa erat, vinculis, ab actuariis aliquot navibus ad alteram ripam pertrahitur: ita primis expositis, alii deinde repetiti ac trajecti sunt. Nihil sane trepidabant, donec continenti velut ponte agerentur. Primus erat pavor, quum, soluta ab ceteris rate, in altum raperentur: ibi, urgentes inter se, cedentibus extremis ab aqua, trepidationis aliquantum edebant: donec quietem ipse timor circumspectantibus aquam fecisset.

9. Describe the "falarica," and distinguish between stipendium and vectigal. Who do you understand by "celoces," "tripudium," "vasa," "moratores," "nummus aureus," "socii navales," "armamenta," "sub corona venire," "conquisitores," "velites," "quadrato agmine," "pluteus"? 8

10. Mention other authors who have written of the Second Punic War, distinguishing such of them as were contemporary or nearly so with the events recorded. What rank as a historian would you assign to Livy among these writers? Refer to passages in support of your opinion. 8

TUESDAY, 29TH NOVEMBER.

[2 P.M. TO 5 P.M.]

LATIN—PAPER II.

A. BARRETT, B.A.; The Rev. F. C. HARZHEIM, S.J.

[The figures to the right indicate full marks.]

1. Translate— 43

The celebrated kingdom of Cashmir, says Elphinstone, is an extensive plain, situated in the heart of the Himalaya mountains, and more than half way up their height. Placed by its elevation above the reach of the heat of Hindostan, and sheltered by the surrounding mountains from the blasts of the higher regions, it enjoys a delicious climate, and exhibits in the midst of snowy summits, a scene of continual verdure and almost of perpetual spring. Trees, belonging to different climates, are scattered over its surface, while fruits of various kinds and flowers of innumerable descriptions are poured forth with spontaneous profusion over the hills and plains. The level country is watered by rills, which issue from the valleys or fall in cascades down the mountains, and collect in different places, especially in two lakes, whose varied banks and floating gardens are the great boast of the valley. This terrestrial paradise can only be approached by difficult and dangerous passes. The road, though a steep ascent on the whole, often rises and descends over rocky ridges; sometimes winds through long and close defiles, and sometimes runs along the face of precipices overhanging deep and rapid rivers.

2. Translate and annotate on the context and on the words in italics. 18

(*a*) Non insueta graves *temptabunt* pabula fetas,
Nec mala vicini pecoris contagio lædet.
Hinc tibi, quæ semper, vicino *ab limite* saepes
Hyblaeis apibus *florem* depasta salicti
Sæpe levi somnum suadebit inire susurro.

(*b*) *Ultima Cumæi* venit iam carminis ætas;
Magnus ab integro sæclorum nascitur *ordo*.
Iam redit et *virgo*, redeunt Saturnia regna;
Iam nova progenies coelo demittitur alto.
Tu modo nascenti *puero* quo ferrea primum
Desinet ac toto surget gens aurea mundo,
Casta fave *Lucina*: *tuus* iam regnat Apollo.

(*c*) Ille dolum ridens "quo vincula nectitis?" inquit
"*Solvite* me pueri; satis est potuisse *videri*"

(*d*) O Lycida, vivi pervenimus, *advena* nostri
(Quod nunquam veriti sumus) *ut* possessor agelli
Diceret" hæc mea sunt, veteres migrate coloni"
Nunc victi tristes, quoniam Fors omnia versat,
Hos illi, quod *nec vertat* bene, mittimus hoedos.

3. State briefly your opinion about the poetical merits of Virgil's Eclogues and about their originality, prove your statements by some references 7

4 Translate and add to each passage notes on the philosophical doctrines contained or referred to in it, and other notes on the words in italics. 27

(*a*) Sed negligentia nobilitatis *augurii* disciplina omissa veritas *auspiciorum* spreta est, species tantum retenta Itaque maximæ rei publicæ partes in his bella, quibus rei publicæ salus continetur, nullis auspiciis administrantur, nulla *peremnia* servantur, nulla ex *acuminibus*, nulla quum *viri vocantur*, ex quo *in procinctu testamenta* perierunt Tum enim bella gerere nostri duces incipiunt, quum auspicia *posuerunt*.

(*b*) Neque enim dici potest in ulla rerum institutione non esse aliquid extremum atque perfectum Ut enim in vite, ut in pecude, nisi quæ vis obstitit, videmus naturam suo quodam itinere ad ultimum pervenire, atque ut pictura et fabrica cæteræque artes habent quemdam absoluti operis effectum, sic in omni natura, ac multo etiam magis, necesse est absolvi aliquid ac perfici

(*b*) Sunt autem qui omnia naturæ nomine appellent, ut Epicurus, qui ita dividit, omnium quæ sint naturam esse corpora et inane quæque his accidant. Sed nos quum dic'mus natura constare administrariique mundum, non ita dicimus, ut glæbam aut fragmentum lapidis aut aliquid eiusmodi nulla cohærendi natura, sed ut arborem, ut animal, in quibus nulla temeritas, sed ordo apparet et artis quædam similitudo.

(*d*) Primum enim a pulmonibus arteria usque ad os intimum pertinet, per quam vox principium a *mente* duceus percipitur et funditur Deinde in ore sita lingua est finita dentibus. Ea vocem immoderate

profusam fingit et terminat atque sonos vocis distinctos et pressos efficit, quum ad dentes et ad alias partes pellit oris. Itaque *plectri* similem linguam nostri solent dicere, chordarum dentes, nares cornibus iis qui ad nervos resonant in cantibus.

5. What is the derivation of cometes, etesiæ? 5

Is Cicero's etymology of "Jupiter" right?

What was the position of the Stoics to the popular deities?

TUESDAY, 29TH NOVEMBER.

[10 A.M. TO 1 P.M.]

PERSIAN—PAPER I.

MIRZA M. COWSER, Esq.; JAMSETJI PALANJI KAPADIA, Esq.

[The figures to the right indicate full marks.]

Háfez and Shah Námah.

1. Translate— 10

تو پنداری که بد کو رفت و جان برد
حسابش باکرام الکاتبین است

and analyse کرام الکاتبین and explain what you understand from it.

2. Explain the following couplet:— 5

گره بباد مزن گرچه بر مراد و زد
که این سخن بمثل بادبا سلیمان گفت

3. What do you understand from— 9

آتش طور کجا وعدهٔ دیدار کجا

Mention the event Háfez alludes to in the above line.

4. Give a brief account of the life of Ferdousi, and describe the passage at arms that took place between him and the other court poets of *Gazni* before Sultán Mahmúd entrusted him with the versification of the Shah Námah. 12

5. Translate— 3

بعشوهٔ که سپهرت دهد ز راه مرو
ترا که گفت که این زال ترک دستان گفت

6. What are the Persian and English names respectively of— 10

(*a*) Tigris; Euphrates; Indus; Red Sea and Mediterranean Sea.

(*b*) قباد—نوشیروان—اشک—اردشیر—شاپور

7. Explain— 10

صدر است و عروض و ابتدا آنکه ضرب
هر چیز که درمیانه آید حشو است

Give the technical names of ضرب and عروض in English.

8. Give examples of— 12

(*a*) تجنیس زاید

(*b*) تجنیس مرکّب

(*c*) لفّ و نشر مرتّب

9. Translate into English— 18

چنین گفت نوشیروان قباد
که چون شاه را سر به پیچد زداد

کند چرخ منشور اورا سیاه
ستاره نخواند و را نیز شاه

ستم نامهٔ عزل شاهان بود
چو درد دل بگناهان بود

بماناد تا جاودان این گهر
هنر مند و با دانش و داد گر

نماند کسی در جهان پایدار
همه نام نیکی بود یادگار

کجا شد فریدون وضحّاک و جم
مهان عرب خسروان عجم

کجا آن بزرگان ساسانیان
ز بهر امیان و ز اشکانیان

نکوهیده تر شاه ضحّاک بود
که بیداد گر بود و ناپاک بود

فریدون فرّخ ستایش ببرد
بمرد او و جاوید نامش نمرد

سخن ماند اندر جهان یادگار
سخن بهتر از گوهر شاهوار

ستایش نبرد آنکه بیداد بود
به تخت وبه کنج مهی شاد بود
کسسته شده از جهان نام اوی
نجوید بگیتی کسی کام اوی

10. Translate into English— 11

بروای زاهد و دعوت مکنم سوی بهشت
که خدا در ازل از بهر بهشتم نسرشت
یکجو از خرمن هستی نتواند برداشت
هرکه درراه فنا و ره حق دانه نکشت
تو و تسبیح و مصلّی و ره زهدو ورع
من و میخانه و ناقوس و ره دیرو کنشت
منعم از می مکن ای صوفی صافی که حکیم
درازل طینت مارا بمی صاف سرشت
صوفی صاف بهشتی نبود زانکه چو من
خرقه درمیکده ها رهن می ناب نهشت
لذت از حور بهشت و لب حوضش نبود
هرکه اودامن معشوق خود از دست بهشت
حافظا لطف حق ارباتو عنایت دارد
باش فارغ ز غم دوزخ و شادی بهشت

TUESDAY, 29TH NOVEMBER.

[2 P.M. TO 5 P.M.]

PERSIAN—PAPER II.

MIRZA M. COWSER, Esq.; JAMSETJI PALANJI KAPADIA, Esq.

[The figures to the right indicate full marks.]

Anvâre Suhieli and Fereshtah.

1. Distinguish between— 3

(a) کشتهٔ نفس کشته نفس

(b) شارع مقدّس and شارع عام

2. Define and explain the various significations of the word 6
میرزا when used before and after a name.

3. Describe some of the earlier exploits of Babar and his character as given in Fereshtah. 5

4. Give Arabic and Persian synonyms respectively of :— 10

(a) کوه—کور—مینو—کمان—دندان فیل—
موی—شهر—لشکر—دیوانه—چشم

(b) علاج—میزان—مشرق—مغرب—ثور—
طبیب—تودیع—مکافات—جواب—تتق

5. To what branches of the Turanian family the اوزبک
belong and why were they so called? Say where were they first located before they entered Central Asia, and when did they embrace Islám?

6. Scan and name the metres of the following verses :— 9

(a) صحبت چوچنین بود جدائی خوشتر

(b) دانا بهیچ شهر و ولایت غریب نیست

(c) چون بلا دید در سپرد ورا

7 Translate into English— 13

فراز منبر خبّاز قرص کرم پنداری
که خورشید جهان تاب است طالع کشته از گردون
تنور نا نوا نار خلیل الله را ماند
کزو هر لحظه آید تازه نانی همچو گل بیرون

حاصل الامر عرب بیچاره که ببوی نان
رمق حیات یافتی چون روی نان دید جبّه
صبر چاک زد و پیش نانوا آمده گفت ای
خواجه چند بستانی که مرا سیر نان سازی
نانوا با خود تاملّی کرد که این کس بیک من
نان سیر شود غاینش دو من و از سه من
خود تجاوز نتواند کرد گفت نیم دینار بده
و چندا نچه بتوانی نان بخور عرب نیم دینار
بداد و برلب دجله نشست نانوا نان می
آورد و عرب بآب تر کرده میخورد تا بها از
نیم دینار بگذشت و بچهار دانگ رسید و
ازان هم تجاوز شده دینار تمام شد نا نوا را
تحمل نماند گفت یا اخاالعرب بدان خدا

ینکه ترا قوت نان خوردن برین وجه کرامت
فرموده بامن بکوی که تا کی نان خواهی
خورد عرب جواب داد که ای خواجه بی
صبری مکن تااین آب میرود من نیزنان میخورم

8. Analyse the name خلیل الله occurring in the above passage and say who and what was he and to what event do the words نار خلیل الله allude. 5

9. Translate into English— 10

و چون بر هندوستانیان معلوم شد که فردوس
مکانی مثل امیر تیمور صاحب قران هندرا
کذاشته بولایت نخواهد رفت شروع در ایل
شدن و آمدن نمودند نخست شیخ کهورن
با دو سه هزار کس از میان دو آب باکره
آمده نوکر شد و علی خان قرملی نیز از
میوات بتقریب پسرانش که در آن مدّت
کرفتار شده بودند بدرکاه آمده بطوق و نقاره
سربلندی یافت واو در عظم جثّه ضرب
المثل بود و همیشه پان در دهن داشته هرکز
شمشیر و سپر از خود جدا نمیکرد و بعد از ان
فیروز خان و شیخ بایزید قرملی با جمعیّت

خویش آمده اقطاع یافتند و رفاهیت وامنیت
پدید آمده بسیاری از پر کنات و قصبات
بقبض در آمد

10 Translate into Persian— 30

Perhaps no person can be a poet, or can even enjoy poetry, without a certain unsoundness of mind, if anything which gives so much pleasure ought to be called unsoundness By poetry we mean not all writing in verse, nor even all good writing in verse. Our definition excludes many metrical compositions which, on other grounds, deserve the highest praise By poetry we mean the art of employing words in such a manner as to produce an illusion on the imagination, the art of doing by means of words what the painter does by means of colours. Thus the greatest of poets has described it, in lines universally admired for the vigour and facility of their diction, and still more valuable on account of the just notion which they convey of the art in which he excelled ·

"As the imagination bodies forth
The forms of things unknown, the poet's pen
Turns them to shape, and gives to airy nothing
A local habitation and a name."

These are the fruits of the "fine frenzy" which he ascribes to the poet,—a fine frenzy doubtless, but still a frenzy.

WEDNESDAY, 30TH NOVEMBER.

[10 A M. TO 1 P.M.]

EUCLID AND GEOMETRICAL CONIC SECTIONS.

J. T HATHORNTHWAITE, M.A. ; T. S. TAIT, M A., B.Sc. ;
The Rev C. F. H. JOHNSTON, M.A. ;
FARDUNJI MANCHERJI DASTUR, M.A.

[The figures to the right indicate full marks.]

1 If three straight lines meet all at one point and a straight line stand at right angles to each of them at that point, the three straight lines shall be in one and the same plane. 12

Having given two planes which intersect each other and a point which does not lie in either of them, draw a plane which shall pass through the given point and be at right angles to the given planes.

2. Every solid angle is contained by plane angles which are together less than four right angles. 8

3. The normal at a point P of a conic meets the axis in G, and PM is drawn at right angles to the directrix which corresponds to the focus S; prove that the triangles SPG, SPM are similar, and that the ratio of SG to SP is constant. 10

4. In a parabola show that the abscissa of a point is half the subtangent. 8

The tangent at P meets the tangent at the vertex in Y and the axis in T, and PN is the ordinate of P; prove that

$$TP.\ TY = TS.\ TN.$$

5. A pair of tangents are drawn to a parabola; show that the area of the figure bounded by the chord of contact and curve is two-thirds of the area of the triangle formed by the chord of contact and tangents. 8

6. If on the major axis of an ellipse as diameter a circle be described and a common ordinate NPQ be drawn meeting the ellipse in P and circle in Q, then the tangents to the ellipse and circle respectively at P and Q will meet the major axis produced in the same point T. 14

Show that *any* circle drawn through N and T cuts the auxiliary circle at right angles.

7. Prove that the rectangle contained by the focal distances of a point on an ellipse is equal to the square of the semi-conjugate diameter. 8

8. Show that the semi-minor axis is the shortest line that can be drawn to the ellipse from the centre. 6

9. From a point P of an hyperbola lines are drawn parallel to the asymptotes and meet them in H, K; prove that the rectangle PH PK is invariable. 14

If a line through the centre meet PH, PK in H′, K′ respectively, and the parallelogram PH′ QK′ be completed, show that Q is a point on the hyperbola.

10. Two chords of an hyperbola are drawn, one meeting one branch and the other both branches of the curve, show that the rectangles contained by their segments are proportional to the squares of the diameters parallel to them. 12

WEDNESDAY, 30TH NOVEMBER.

[2 P.M. TO 5 P.M.]

STATICS.

J. T. HATHORNTHWAITE, M.A.; T. S. TAIT, M.A., B.Sc.;
The Rev. C. F. H. JOHNSTON, M.A.;
FARDUNJI MANCHERJI DASTUR, M.A.

[The figures to the right indicate full marks.]

1. State and prove the theorem known as the *polygon of forces*, and find whether its converse is true or not. 8

2. A force of 100 lbs. is to be resolved into two forces P and Q acting at an angle of 60° and whose difference is to be 10 lbs.; find P and Q. 6

3. A rod AB is 10 inches long and is inclined at an angle of 45° to the horizon; weights of 6 lbs., 5 lbs. and 4 lbs. are hung at distances of 4 inches, 6 inches and 9 inches, respectively from the end A. If the rod be hinged at A and supported at B by a string making an angle of 30° with the rod, find the tension of the string. 11

4. If three forces acting on a particle keep it in equilibrium, and a triangle be drawn having its sides perpendicular to the lines of action of the forces, show that the sides of the triangle will be proportional to the forces respectively perpendicular to them. 9

5. Find the magnitude and direction of the resultant of any number of forces acting at a given point in the same plane. 13

A heavy particle W is supported on a smooth inclined plane, whose inclination to the horizon is a, by three forces each equal to P acting along the plane and in directions making angles a and $2a$ with it; if $\sin a = \frac{3}{5}$ show that

$$P = \frac{15}{53} W.$$

6. Show that a system of particles can have only one centre of gravity. 11

Find the distance of the centre of gravity of five equal particles placed at five of the angular points of a regular hexagon from that angular point where no particle is placed, the side of the hexagon being 10 inches.

7. Prove that in the common steel-yard the distances of the graduations from a certain point are in arithmetical progression. 8

8. Investigate the relation between P and W in the first system of pullies when the weights of the pullies are taken into account. 13

In this system of pullies show that there is always a mechanical advantage if the weight to be supported exceed the weight of the heaviest pully.

9. Two equally rough inclined planes whose angles of inclination are α and β are placed back to back, their heights being the same, and weights P and Q are placed on the planes α and β respectively and are connected by a string passing over their common vertex. When the weight P is on the point of sliding down the plane prove that— 13

$$P \sin(\alpha - \epsilon) = Q \sin(\beta + \epsilon)$$

where $\tan \epsilon$ = coefficient of friction.

10. Enunciate the principle of *virtual velocities*, and demonstrate the principle in the case of the *screw*. 8

THURSDAY, 1ST DECEMBER.

[10 A.M. TO 1 P.M.]

ENGLISH—PAPER I.

(*Group A.*)

F. G. SELBY, B.A.; H. LITTLEDALE, B.A.

1. What was the Nonsense Club? Give some account of the literary work of Thornton and Colman, *or* of Churchill.

2. Give a summary of Southey's remarks on the formation of English poetic diction and metre.

3. State Southey's opinion of Dryden as a poet and critic, *or* Cowper's opinion of Pope's translation of Homer.

4. Narrate the cases of Simon Browne and Van Lier. How was Cowper affected by them?

5. The character and literary powers of Hayley.

6. What is Cowper's account of his own state of mind, as given in his letters to Mr. Newton?

7. What do you gather from Cowper's letters as to his literary tastes?

8. Who were Lady Hesketh and Lady Austen? Give a short account of Cowper's connection with the latter, and of the causes that have been assigned for their separation.

9. What opinions does Cowper express about India, America, and the slavery question?

10. Explain—

(*a*) It had never occurred to me that a parson has no fee-simple in the home and glebe he occupies.

(*b*) Wilkes ought to have known that it was among the philosophers of the porch and not of the sty that the first men of antiquity were found.

(*c*) A subscription is surely on every account the most eligible mode of publication. When I shall have emptied the purses of my friends, and of their friends, into my own, I am still free to levy contributions on the world at large, and I shall then have a fund to defray the expenses of a new edition.

(*d*) The morning is beautiful, and tempts me forth into the garden. It is all the walk that I can have at this season, but not all the exercise. I ring a peal every day upon the dumb-bells.

(*e*) I have often observed that there is a regular alteration of good and evil in the lot of men, so that a favourable incident may be considered as the harbinger of an unfavourable one and *vice versâ*. Dr. Maden's experience witnesses to the truth of this observation. One day he gets a broken head, and the next a mitre to heal it.

(*f*) If they come, they will stay, I imagine, a parson's week, that is to say about a fortnight, and no longer.

THURSDAY, 1ST DECEMBER.

[2 P.M. TO 5 P.M.]

ENGLISH—PAPER II.

Group A.

F. G. SELBY, B.A.; H. LITTLEDALE, B.A.

Pope's Works—Globe Edition.

1. Paraphrase—

'Twas then, the studious head or gen'rous mind,
Follow'r of God or friend of human-kind,
Poet or Patriot, rose but to restore
The Faith and Moral Nature gave before;
Relum'd her ancient light, not kindled new;
If not God's image, yet his shadow drew:
Taught Pow'r's due use to People and to Kings,
Taught not to slack, nor strain its tender strings,

The less, or greater, set so justly true,
That touching one must strike the other too,
'Till jarring int rests, of themselves create
Th' according music of a well mix'd state
Such is the World's great harmony, that springs
From Order, Union, full consent of things
Where small and great, where weak and mighty, made
To serve, not suffer, strengthen, not invade,
More pow rful each as needful to the rest,
And, in proportion as it blesses, blest,
Draw to one point, and to one centre bring
Beast, Man, or Angel, Servant, Lord, or King

2 Explain the following —

(a) 't is yours to shake the soul
With Thunder rumbling from the mustard-bowl.

(b) O Thou! Whatever title please thine ear,
Dean Drapier, Bickerstaff, or Gulliver!

(c) In men, we various Ruling Passions find;
In women, two almost divide the kind

(d) Worth makes the man, and want of it, the fellow,
The rest is all but leather or prunella

(e) Hope springs eternal in the human breast
Man never Is, but always To be blest

(f) The mouse that always trusts to one poor hole,
Can never be a mouse of any soul.

(g) With empty hands no tassels you can lure,
But fulsome love for gain we can endure

(h) So Zembla's rocks (the beauteous work of frost)
Rise white in air, and glitter o'er the coast

(i) Shrines! Where their vigils pale ey'd virgins keep,
And pitying saints, whose statues learn to weep!

(j) 'Tis what the vicious fear, the virtuous shun,
By fools 'tis hated, and by knaves undone!

(k) Some beauties yet no Precepts can declare,
For there's a happiness as well as care

(l) Thy trees, fair Windsor! Now shall leave their woods,
And half thy forests rush into thy floods

3 Write a short prose narrative of Umbriel's visit to the Cave of Spleen

4 Consider Pope as a painter of portraits in verse, and analyse his characters of Atticus, Villiers, and Atossa.

5. Give some account of Bolingbroke, and compare Pope's estimate of him with Burke's.

6. From what poems are the following passages taken, and to whom do they allude :—

(*a*) He thanks you not, his pride is in Piquet,
Newmarket-fame, and judgment at a Bet.

(*b*) His numbers rais'd a shade from hell,
Hers lift the soul to heav'n.

(*c*) Of Manners gentle, of Affections mild ;
In Wit, a Man, Simplicity, a Child.

(*d*) What beck'ning Ghost, along the moon-light shade
Invites my steps, and points to yonder glade ?

(*e*) What shook the stage, and made the people stare ?
Cato's long Wig, flow'r'd gown, and lacquer'd chair.

(*f*) High on a throne with trophies charg'd, I view'd
The youth that all things but himself subdu'd.

(*g*) He from the taste obscene reclaims our youth,
And sets the Passions on the side of truth,
Forms the soft bosom with the gentlest art
And pours each human virtue in the heart.

N.B.—In translating into English prose, students are directed to give a *close*, and at the same time, an *idiomatic* rendering, No merit will be assigned to a loose paraphrase that evades the difficulties of expression and meaning in the original.

FRIDAY, 2ND DECEMBER.

[10 A. M. TO 1 P. M.]

(*Group A.*)

SANSKRIT—PAPER I.

RAMKRISHNA GOPAL BHANDARKAR, M.A.;
YASHVANT VASUDEV ATHALE, M.A., LL.B.

[The figures to the right indicate full marks.]

1. Translate:— 14

(*a*) भ्रातीन्विटान्स्वभुजविक्रमलब्धवर्णान्
राजापमानकुपितांश्च नरेन्द्रभृत्यान् ।

उत्तेजयामि सुहृदः परिमोक्षणाय
यौगन्धरायण इवोदयनस्य राज्ञः ॥

State the historical allusion herein contained.

(b) एतत्तद्धृतराष्ट्रचक्रसदृशं मेघान्धकारं नभो
हृष्टो गर्जति चातिदर्पितबलो दुर्योधनो
वाशिखी ।

अक्षद्यूतजितो युधिष्ठिर इवाध्वानं गतः
कोकिलो

हंसाः संप्रति पाण्डवा इव वनादज्ञातचर्यां-
गताः ॥

(c) चिन्तासक्तनिमग्नमन्त्रिसलिलं दूतोर्मिश-
ङ्काकुलं

पर्यन्तस्थितचारनक्रमकरं नागाश्वहिंसा-
श्रयम् । ०

नानाबाशककङ्कपक्षिरुचिरं कायस्थसर्पा-
स्पदं

नीतिक्षुण्णतटं च राजकरणं हिंस्रैः
समुद्रायते ॥

2 Annotate on the following words:— 6

काणेलीमातः, महाब्राह्मण, काकपदशीर्ष-

मस्तक, भट्टारक, सभिक, शाक्यश्रमणक,

अभुजिष्या, अधिकरणिक, व्यवहार.

3. What are the constituents of a court of justice as laid down by Hindu lawgivers? Describe in detail the trial of Chárudatta. 6

4. State S'arvilaka's defence of theft. Who is described to be the patron saint of robbers? 5

5. Take a critical review of the drama of Mrichchakatika. 12

6. Translate:— 15

(*a*) क्रोधोद्बोधव्यतिकरसदाङ्गिर्भरायासयोग्यो
मद्दोर्दण्डोपगमसदृशस्त्रयक्षशिष्योचितश्च ।
दत्तातङ्को विबुधमनसां कर्तुमद्धा कबन्धं,
चापादस्मात्प्रसरतु शरः संमुखः षण्मुखेऽपि ॥

(*b*) निश्चक्रचीत्कृतिरलब्धमहीतलत्वात्
क्षुण्णाम्बुदोदरपयोमयगर्भसारः।
भूस्तुण्डघट्टनविवर्तित ऋक्षलक्षः
पुत्रस्यते गगनमुत्पतितो रथोऽयम् ॥

(*c*) निर्दग्धत्रिपुरेन्धनोऽस्तु गिरिशः क्रौञ्चाचलच्छेदने
पाण्डित्यं विदितं गुहस्य किमु तावज्ज्ञातयुद्धोत्सवैः
लूत्वा पङ्कजलावमाननवनं चैतस्य लङ्कापते-
र्वीराणां चरिताद्भुतस्य परमे रामः स्थितः सीमनि॥

7. Give a summary of the plot of the Bála Rámáyana, and state which parts thereof are due to the inventive genius of the poet. 10

8. What do you know of the author of the Bála Rámáyana? Compare his style and power of invention with those of Bhavabhûti. 9

9. Translate into Sanskrit and English:— 12

a. भीआ भअप्पदाणं ददतस्स परोवआररसिअस्स
नइ होइ होउणासो तहानि अलोए गुणो ज्जेव्व ॥

b. चेटः। अले पण्हं दे दइश्शं।
विदू। अहं दे मुण्डे गोडं दइस्सं।
चेटः। अले जाणाहि दाव तेणाहि कहिंश काले
चूआ मो लेन्ति।
विदू। अरे दासीए उत्ता गिम्हे।

c. झंजमध णिअपोटं निच्चं जग्गेध झाण पडहेण।
विशमा इन्दि अ चोला हलन्ति चिलशंचिदं धम्मं॥

d. हीहीभो। इध बि चउट्टे पओट्टे जुवदिकर ताडिदा जलधरा विअ गम्भीरं णदन्ति मुरआ। झीणपुण्णाओ विअ गअणादो तारआओ णिवडन्ति कंसतालआ महुअरविरुअमहुरं वज्जादि वंसो। इअं अवरा ईसापणअकुविदकामिणी विअ अङ्कारोविदा कररुहपरामरिसेण सारिज्जदि वीणा। इमाओ अवराओ कुसुमरसमत्ताओ विअ महुअरिओ आदिमहुरं पगीदाओ गणिआदारिआओ नच्चीअन्ति।

Mention some of the Prâkrit dialects used in the Mrichchhakatika, with their characteristics. What are the dialects of the above passages, and why?

10. State and explain the alankâras in the following:— 12

a. घोणोन्नतं मुखमपाङ्गविशालनेत्रं
नैतद्धि भाजनमकारणदूषणानाम् ।
नागेषु गोषु तुरगेषु तथा नरेषु
नह्याकृतिः सुसदृशं विजहाति वृत्तम् ॥

b. पक्षविकलश्च पक्षी शुष्कश्च तरुःसरश्च जलहीनम् ।
सर्पश्चोद्धृतदंष्ट्रस्तुल्यं लोके दरिद्रस्य॥

c. एते हि विद्युद्गुणबद्धकक्षा
गजा इवान्योन्यमभिद्रवन्तः ।
शक्राज्ञया वारिधराः सधारा
गां रूप्यरज्ज्वेव समुद्धरन्ति ॥

d. छायार्थं ग्रीष्मसंतप्तो यामेवाहं समाश्रितः ।
अजानता मया सैव पत्रैः शाखा वियोजिता ॥

FRIDAY, 2ND DECEMBER.

[2 P.M. TO 5 P.M.]

(*Group A.*)

SANSKRIT—PAPER II.

RAMKRISHNA GOPAL BHANDARKAR, M.A.;
YASHVANT VASUDEV ATHALE, M.A., LL.B.

[The figures to the right indicate full marks.]

1. Translate and explain :— 35

(a) प्रभुसंमितशब्दप्रधानवेदादिशास्त्रेभ्यः सुहृत्संमितार्थतात्पर्यवत्पुराणादीतिहासेभ्यश्च

शब्दार्थयोर्गुणभावेन रसाङ्गभूतव्यापारप्रवणतया विलक्षणं काव्यम् ।

(b) न ताटस्थ्येन नात्मगत्वेन रसः प्रतीयते नोत्पद्यते नाभिव्यज्यते । अपितु काव्ये नाट्ये चाभिधातो द्वितीयेन विभावादिसाधारणीकरणात्मना भावकत्वव्यापारेण भाव्यमानः स्थायीसत्त्वोद्रेकप्रकाशानन्दमयसंविद्विश्रान्तिसतत्वेन भोगेन भुज्यत इति भट्टनायकः।

(c) यदप्युच्यते नैमित्तिकानुसारेण निमित्तानि कल्प्यन्त इति तत्र निमित्तत्वं कारकत्वं ज्ञापकत्वं वा । शब्दस्य प्रकाशकत्वान्न कारकत्वम् । ज्ञापकत्वं त्वज्ञातस्य कथम् । ज्ञातत्वं च संकेतेनैव स चान्वितमात्रे । एवं च निमित्तस्य नियतत्वं यावन्न निश्चितं तावन्नैमित्तिकस्य प्रतीतिरेव कथमिति नैमित्तिकानुसारेण निमित्तानि कल्प्यन्त इत्यविचारिताभिधानम् ।

2. Explain अविवक्षितवाच्यध्वनि and विवक्षितवाच्यध्वनि; and also the divisions of the latter. In which of these have you अभिधामूला व्यञ्जना and लक्षणामूला व्यञ्जना? 11

3. (a) जा ठेरं वहसन्ती क इव अणम्बुरुहबद्धविणिवेसा । 8

दावेदि भुअणमण्डलमण्णं बिअ जअइ
सावाणी ॥

(b) सहि विरइऊण माणस्स मज्झ धीरत्तणेण
आसासं ।
पिअद्दंसणविहलंखलखणम्मिसहसत्ति तेण
ओसरिअं ॥

What sort of ध्वनि does Mammata deduce from these and how?

4. What do you mean by रसाभास and भावाभास? Quote instances of them from any play you may have read. 6

5. Is there any *vyangya* or suggested sense in instances of *Samâsokti* and *Aprastutaprasansâ?* If so, state whether the *vyangya* is *pradhâna* or *gunîbhûta;* and if the latter, under which of the eight classes of it given by Mammata does it fall? What other *alankâras* involve a *vyangya* similarly? 8

6. Explain the faults, अविमृष्टविधेयांशत्व, प्रतिकूलवर्णत्व, भग्नप्रक्रमत्व, व्याहतत्व. What are these the fault of? Give two faults of रस. 8

7. What *gunas* does Mammata admit? Explain them; and state on what they depend. Are they to be considered as *gunas* of *rasa* or *s'abda?* Give reasons for your answer. 8

8. What *alankâras* depend both on *s'abda* and *artha?* Explain, giving instances. 6

9. Refer to the passages in the Kâvyaprakâs'a which contain an implication that *rasa* is an essential constituent of a *kâvya;* and compare these with the author's definition of a *kâvya.* 10

THURSDAY, 1ST DECEMBER.

[10 A.M. TO 1 P.M.]

POLITICAL ECONOMY.

S. NEWCOME FOX, B.A.; M. MACMILLAN, B.A.

[The figures to the right indicate full marks.]

1. State fully the circumstances which determine the value of various kinds of commodities. 11

2. Give details of any schemes of pure or modified socialism with which you are acquainted, and consider what may be said for and against socialism. 12

3. Compare India with other countries as regards its resources in land, labour, and capital, and show what hope there is of remedying the deficiency of capital. 11

4. Compare peasant proprietorship with other systems of land tenure. 12

5. Distinguish bounties from drawbacks, and by a consideration of the particular branches of industry to which the bounty system has been or is applied, show what good effects bounties were intended to produce and what bad effects they must actually produce. 11

6. Trace the steps by which the towns of Europe gradually rose to wealth and power in the Middle Ages and show how their progress promoted civilisation. 10

7. Mention some of the worst taxes that have ever been imposed, and point out the way in which they have interfered with the prosperity of the countries in which they were levied. 11

8. How does the income-tax to a certain degree encourage spending and discourage saving? What other objections may be reasonably urged against this tax? 10

9. Explain how it is that the depreciation of silver during the last thirty years has been so much greater than the depreciation of gold in spite of the immense increase in the supply of the latter metal. Is silver likely to regain its former value? 12

THURSDAY, 1ST DECEMBER.

[2 P.M. TO 5 P.M.]

HISTORY—PAPER I.

S. NEWCOME FOX, B.A.; M. MACMILLAN, B.A.

[The figures to the right indicate full marks.]

Give dates throughout.

History of India in the 16th, 17th and 18th Centuries.

1. What sons did Báber leave behind him? How was his kingdom partitioned among them, and what was their subsequent attitude towards one another? 10

2. Examine the political situation of Akber after the death of Bairám Khán. How did he shape his plans in order to consolidate his empire? 10

3. State the principal measures by which Akbar alleviated the position of his Hindu subjects. 10

4. Write a description of the revolt of Khán Jehán Lodi. What was the state of the Deccan at this period? 10

5. Give an outline of the history of the kingdom of Bijápur from the reign of Ismail Adil Sháh down to the year A.D. 1686. 10

6. Describe shortly the most important of Sivaji's institutions. 10

7. Give a sketch of the part played by Ahmed Sháh Durráni in Indian history. 10

8. Describe the nature of the first great change in the constitution of the East India Company and in the Government of India. What criticism is it open to? 10

9. Give Mill's general estimate of the character and administration of Warren Hastings. Do you consider that estimate a just one? 10

10. What were the relations between the British State and the Mahrátta Chiefs when Lord Cornwallis reached India in 1805, and what policy did the latter Governor General adopt? 10

ENGLISH HISTORY.

Institutions, Literature, and Science.

1. What causes led to the formation of a standing army in England? 10

2. What were the circumstances that brought about the Triple Alliance? Examine the nature and effect of that alliance. 12

3. Describe (*a*) the establishment of the Bank of England; (*b*) the origin of the National Debt. 10

4. State shortly the constitutional principles that were established and confirmed by the Revolution of 1688. 12

5. Give some account of the King's dispensing power, with instances of its use. 12

6. What views did Locke enunciate in his treatise on civil government? How does Hallum criticize his literary style? 12

7. What interest attaches to the letters of Junius? 10

8. Write a life of Dryden, with an estimate of his merit as a critic. 12

9. Give some particulars of Boyle's scientific researches. 10

Political.

1. Mention two notorious political plots during the reign of Charles II., and examine the objects of the conspirators. 10

2. Sketch the character of Clarendon, and relate the circumstances that led to his fall. 10

3. Mention the principal events in the struggle between England and France from 1689—1697. 12

4. What was the cause and result of the trial of the Seven Bishops? 10

5. How did the war of the Spanish Succession originate? Give an outline of its leading incidents. 12

6. Give details of the Jacobite Rebellion in 1715. 10

7. Write a brief biography of *either* William Pitt *or* Charles James Fox. 12

8. Give some account of the origin of the Methodists. 12

9. State shortly what events led to the First and Second Treaties of Paris, and give the chief articles in those treaties. 12

FRIDAY, 2ND DECEMBER.

[10 A.M. TO 1 P.M.]

HISTORY—PAPER II.

S. NEWCOME FOX, B.A.; M. MACMILLAN, B.A.

[The figures to the right indicate full marks.]

POLITICAL HISTORY.

English History.

1. Contrast and account for the characters of the Parliaments that resulted from the General Elections of 1661 and 1679 respectively. 10

2. Give a short sketch of the Members of the Cabal Ministry, and criticise their policy 10

3. What was the attitude of James II. towards (*a*) the Puritans, (*b*) the Quakers? 10

4 Give some particulars of Monmouth's rebellion. 10

5. What ministerial arrangements were made after the acceptance of the Crown of England by William and Mary? 10

6. Mention the chief incidents in the career of Marlborough, and give your estimate of his character. 10

7. Under what circumstances and with what object were the Quadruple Alliances of 1718 and 1745 effected? 10

8. What led to the arrest of John Wilkes on a general warrant? Criticise that step. 10

9. For what political events is the year 1782 memorable? 10

10. Give details of— 10

(*a*) The battle of the Nile.
(*b*) The battle of Copenhagen.

Roman History.

1. What was the conduct of Q. Fabius Maximus when opposed to Hannibal in the field? Examine his attitude towards Scipio, and show by quotations, if possible, how his policy was viewed by Roman writers. 12

2. How did the third Punic War arise? 10

Draw a plan of Carthage, and describe its siege and capture.

3. When did professional soldiers displace the old militia of the Republic, and what was the effect of the change? 12

4. What circumstances seemed to point to the necessity of some measures of reform at the time of Tiberius Gracchus? Give an outline of his career. 12

5. Sketch the campaign which terminated in the battles of Aquæ, Sextiæ and Vercellæ. 10

6. What were the chief political measures of Sylla when Dictator, and what was their general tendency? 12

7. Write a short life and character of M. Porcius Cato of Utica. 10

8. What occasioned the breach between Pompey and Cæsar? When did it arise, and what part did the Senate play in the matter? 10

9. Who was C. Julius Cæsar Octavianus? Criticise his attitude towards (*a*) Mark Antony, (*b*) Cicero. 12

Greek History.

1. Describe the war between Athens and Ægina after the battle of Marathon. How did the quarrel arise and from what point of view is it important? 10

2. Mention the salient points in the career of Themistocles, and contrast his character with that of Aristides. 10

3. Illustrate by a plan the position of the Persian and Greek forces at Thermopylæ, and give a brief account of the engagement there. 10

4. Sketch the rise to power of Gelo of Syracuse and give some details of his reign. 10

5. What causes operated to affect the position and influence of Athens after the repulse of the Persians? 10

6. State the events that immediately preceded the peace of Nikias. What were its terms? 10

7. For what are the undermentioned places memorable— 10

Cyzicus, Arginusæ, Cunaxa, Chæronea.

8. Give short lives and characters of *two* of the following:— 10

Lysander, Epaminondas, Phocion.

9. What set of circumstances led to the Macedonian supremacy in Greece? 10

10. What part was played by the Achæan league during the period of history under consideration? 10

FRIDAY, 2ND DECEMBER.

[2 P.M. TO 5 P.M.]

HISTORY—PAPER III.

S. NEWCOME FOX, B.A.; M. MACMILLAN, B.A.

[The figures to the right indicate full marks.]

INSTITUTIONS, LITERATURE AND SCIENCE.

English History.

1. Explain the nature of the change made in the executive government by the institution of a cabinet, and describe the composition of that body and its mode of procedure. 12

2. What considerations prompted the constitutional provisions embodied in the Act of Settlement? How and for what reasons were they afterwards modified? 11

3. Mention some of the most glaring instances of the abuse of the Royal prerogative during the period of history under review. 11

4. Give a history of the newspaper press from its earliest beginnings to the end of the eighteenth century. 12

5. Describe the circumstances of the establishment of the Royal Society, and its operations during the reign in which it was founded. 10

6. Give as full an account as you can of the life, character and writings of either Bunyan, Berkeley or Defoe. 12

7. Explain the meaning of the *Hind and Panther* by reference to events in general history and in the life of the author. 9

8. Compare Byron and Scott as men and as poets. 12

9. From the history of the period under consideration estimate the effect of patronage upon literature. 11

INSTITUTIONS, LITERATURE AND RELIGION.

Roman History.

1. Mention any laws or customs that tended to make the senate an oligarchical body. 12

2. What effect had the enfranchisement of the Italians upon the Roman Constitution? 10

3. How do you explain the decline in Roman morality which followed the wars with Carthage? Were any attempts made to check it? 12

4. Give an abstract of the chief Sempronian laws? With what object were they framed, and what was their result? 12

5. What position should be assigned to Ennius in Latin literature? How did later Roman critics regard him? 10

6. Who was the first great poet of satire at Rome? Sketch his life, and enumerate subsequent eminent writers in this vein. 10

7 Give some account of C. Sallustius Crispus. Mention his chief works, and criticise his title to be ranked as an historian. 10

8. What were the most famous of Cicero's essays. Give your estimate of his literary and oratorical style. 12

9. What was the attitude of an educated Roman towards religion in the last days of the Republic? Illustrate your answer from the views on this subject of Lucretius the Poet. 12

Greek History.

1. What does Grote say regarding the fickleness commonly attributed to the Athenian Democracy? 12

2. Describe briefly the powers of the Senate of Areopagus before and after the reforms of Pericles. 10

3. Give some account of the meaning of the term "Sophist." In what sense does Plato use it? 12

4 What forms the subject of the three last books of the history written by Herodotus? Examine his historical manner and the moral of his writings. 10

5 How does Grote criticize the working of the Athenian dikasteries? 12

6. When was the dramatic genius of Athens at its height? Give the names of some of the most eminent dramatists of that period. 10

7 What may be said to have been the leading peculiarities of Socrates? What comment does Grote pass upon his condemnation? 12

8. Give a sketch of the career of Demosthenes and mention the most celebrated of his political orations. 12

9. Write a brief account of— 10

(*a*) The Academicians.
(*b*) The Peripatetics.

THURSDAY, 1ST DECEMBER.

[10 A.M. TO 1 P.M.]

LOGIC—PAPER I.

S. NEWCOME FOX, B.A.; M. MACMILLAN, B.A.

[The figures to the right indicate full marks.]

1 What is the place of Attributes in a classification of existing things? Give a short account of the various species of Attributes. 12

2. Examine Hobbes' theory of predication. 11

3 If all definitions are of names, how can the truths of geometry be deduced from the definitions of Euclid, and how can the search for correct definitions lead to the attainment of scientific knowledge 11

4 What account does Mill give of the nature and value of the syllogism? Can new truth be obtained by syllogistic reasoning? 12

5. What value does Herbert Spencer attach to the test of inconceivableness, and on what grounds? Are the considerations he brings forward in support of his view convincing? How does Herbert Spencer's account of this test differ from Whewell's? 12

6. Examine the volitional theory of causation. 10

7. Explain and illustrate the two ways in which causes combine together, and show which of the two kinds of combination is more amenable to the experimental methods. 11

8. When are individual facts and laws of nature said to be explained? Give examples of the various kinds of explanation 13

9. What is the meaning of chance? Show that the greatest possible frequency of coincidence may be the result of chance, and that a much less frequency of coincidence may point to a causal connexion. 9

THURSDAY, 1ST DECEMBER.

[2 P.M. TO 5 P.M.]

LOGIC—PAPER II.

S. NEWCOME FOX, B.A.; M. MACMILLAN, B.A.

[The figures to the right indicate full marks.]

1. Explain the nature of circumstantial evidence and show how to calculate the probability of the general conclu- 11

sion from the probability of the conclusions of each separate argument.

2 Point out the various ways in which effects react upon their causes, and how the want of recognition of this reaction often leads to error 11

3 How is classification subsidiary to induction? Distinguish between natural classification and artificial classification Are artificial classifications utterly useless? What are the characteristics of a satisfactory natural classification? 11

4 Confute the following argument, and point out what would have to be maintained by any one who wished to prove (1) that its conclusion is probable, (2) that its conclusion is certain :—"Since puppies who are just about to see are as blind as those newly born, it necessarily follows that Plato, since he did not yet see wisdom, must have been as mentally blind as Phalaris" 11

5 State and compare together the views of Locke, Malebranche, Hume and Kant on the subject of causation 12

6 Give instances to show which of the inductive methods may be most advantageously applied to the sciences of electricity, astronomy, sociology, geology, and physiology Also show in the case of any of those sciences what methods can seldom be applied with effect 14

7 Describe the method of residues. Are there any reasons against including it among the inductive methods? 14

8 Examine the following arguments, stating them where possible in syllogistic form — 16

Gallicia is the only province of Spain where cases of leprosy are still frequent; a convincing proof this that the disease is the result of foul feeding, and an inattention to cleanliness, as the inhabitants of Gallicia, with regard to the comforts of life and civilized habits, are confessedly far behind all the other natives of Spain—(Borrow).

Only the extended is divisible; therefore force as unextended is indivisible Force must be simple because only that which is divisible can be complex Force must be original, primitive, and eternal, because only that which is composite can arise, and only that which arises can pass away. (Leibnitz).

No conception as such can be so conceived as if it contained within itself an infinite number of representations Nevertheless space is so conceived, for all parts of space are equally capable of being produced into infinity Consequently the original intuition of space is an intuition à priori and not a conception —(Kant)

FRIDAY, 2ND DECEMBER.

[10 A.M. TO 1 P.M.]

MORAL PHILOSOPHY—PAPER I.

S. NEWCOME FOX, B.A.; M. MACMILLAN, B.A.

[The figures to the right indicate full marks.]

1. What moral judgment would be passed upon the assassination of President Garfield and of the Czar of Russia by intuitionists and utilitarians, and on what grounds? Carefully examine any arguments that might be brought forward in support of such acts of political assassination. 12

2. What is the importance of the sanctions in ethics? 11

3. Show what Methods of ethics or what processes in each Method are really inductive or deductive. 11

4 What logical connexion has been thought to exist between psychological egoism and any of the Methods? Does belief in this doctrine necessarily determine those who hold it to accept any one system of morality rather than another? 12

5. In what relation does the duty of fidelity to promises stand to truth, justice, and the duty of order? Does common sense prescribe the keeping of promises under all circumstances? 11

6. Explain what Sidgwick means when he says that "it would seem that most of the commonly received maxims of duty—even of those which at first sight appear absolute and independent—are found when closely examined to contain an implicit subordination to the more general principles of prudence and benevolence: and that no principles except these can be admitted as at once intuitively clear and certain and complete as a direction for conduct." 12

7. Point out the chief divergencies between utilitarianism and the morality of common sense. 11

8. Is self-development a definite and satisfactory means to the attainment of happiness? 10

9. Is virtue voluntary? 10

FRIDAY, 2ND DECEMBER

[2 P.M. TO 5 P.M.]

MORAL PHILOSOPHY.—PAPER II

S. NEWCOME FOX, B.A.; M. MACMILLAN, B.A.

[The figures to the right indicate full marks.]

1 Explain and illustrate the distinction which Butler draws between the effect of repetition upon passive impressions and upon actions. 12

2 What connexion does Butler find to exist between the character of our actions and the effect produced by them upon our happiness in this life, and how does he use this observed connexion to support his own views and to confute objections that might be urged by opponents? 12

3 "Our nature corresponds to our external condition." How does Butler exemplify and explain this fact. Could any other theory besides that employed by him explain how the correspondence may have been produced? 13

4 How is necessarianism treated in the Analogy? 12

5 In what relation does self-love stand to benevolence and to the particular passions, appetites, and affections? 13

6 By what arguments does Butler support his own view of compassion against the doctrines of Hobbes and the Stoics? 13

7 What is the vicious circle in which Butler seems to become entangled when he attempts to establish the ethical standard? Does he really commit the fault of which he is accused? How far would such an error, if proved, impair the value of his ethical teaching. 13

8 How does Butler meet the difficulty of reconciling the existence of evil with the divine government of the world? 12

THURSDAY, 1ST DECEMBER

[10 A M. TO 1 P M]

ANALYTICAL GEOMETRY OF TWO DIMENSIONS

J. T. HATHORNTHWAITE, M A. ; T. S. TAIT, M A., B.Sc ;

The Rev. C F. H. JOHNSTON, M A. ;

FARDUNJI MANCHERJI DASTUR, M.A.

[The figures to the right indicate full marks.]

1 Investigate the equation of the straight line in the form 8

$$x \cos a + y \sin a - p = 0$$

and show what is represented by the equation—

$$y^2 - 2xy \sec \theta + x^2 = 0.$$

2. Find the area of a triangle, the co-ordinates of whose angular points are $x_1\, y_1$, $x_2\, y_2$, $x_3\, x_3$. 8

What does the expression become when the points are—

$$(a - b), (a - c) ; (b - c), (b - a) ; (c - a), (c - b) ?$$

3. If tangents be drawn to the circle $x^2 + y^2 = a^2$ from an external point (h, k) prove that the equation of the chord of contact is $hx + ky = a^2$. 10

If the point (h, k) lie on a fixed straight line show that the chord of contact will pass through a fixed point.

4 Let O be a fixed point and P any point on a fixed straight line and on OP let there be taken a point Q such that OP. OQ is constant ; show that the locus of Q is a circle passing through O. 10

5 A is the origin, B a fixed point in the axis of y, BQ a line parallel to the axis of x, and in AQ produced if necessary is taken a point P such that its ordinate PM is equal to BQ ; show that the locus of P is the parabola $y^2 = cx$, c being equal to AB. 10

6 Show that the straight line $y = mx + c$ in general meets the parabola $y^2 = 4ax$ in two points that one of the points will be at an infinite distance if $m = 0$, and that the two will be coincident, if $c = \frac{a}{m}$. 14

Through a point P on the parabola $y^2 = 4ax$ is drawn a straight line such that the part of it intercepted between the

axes is bisected in P; prove that it will be a tangent to the parabola $y^2 + 32ax = 0$.

7 Obtain the equation to the ellipse in the form— 10

$$y^2 = \frac{b'^2}{a'^2}(a'^2 - x^2),$$

and investigate the magnitude of a' and b'.

8 A straight line of given length slides between two rectangular axes; find the locus of any fixed point on the line. 8

9. A double ordinate PP′ is drawn to an ellipse whose axis major is AA′, (the co-ordinates of P being $a \cos \phi$, $b \sin \phi$), and AP, A′P′ meet in Q; show that the locus of Q is an hyperbola, having the same axes as the ellipse. 10

10. Find the condition that the straight line $y = mx + c$ 12

(1) may touch the hyperbola $\frac{x^2}{a^2} - \frac{y^2}{b^2} = 1$, (2) may be an asymptote; and show that if an hyperbola be referred to its asymptotes as axes, its equation must be of the form

$$xy = \text{constant}.$$

THURSDAY, 1ST DECEMBER.

[2 P.M. TO 5 P.M.]

DIFFERENTIAL AND INTEGRAL CALCULUS.

J. T. HATHORNTHWAITE, M.A.; T. S. TAIT, M.A., B.Sc.;

The Rev. C. F H. JOHNSTON, M.A.;

FARDUNJI MANCHERJI DASTUR, M.A.

[The figures to the right indicate full marks]

1. State and prove the rule for determining the differential coefficient of a product. 5

2. Obtain $\frac{dy}{dx}$ in the following cases:— 11

$$(1)\ y = \tan^{-1} x.$$

$$(2)\ x = e^{\frac{x-y}{y}}.$$

3 State *Leibnitz's Theorem* and apply it to prove that— 12

if $u = (\sin^{-1} x)^2$,

then $(1 - x) \dfrac{d^{n+2} u}{dx^{n+2}} - (2n + 1) x \dfrac{d^{n+1} u}{dx^{n+1}} - n \dfrac{d^n u}{dx^n} = 0$

4 When is a function said to be *continuous* between certain limits? Give examples of continuous functions 12

If a continuous function $\phi(x)$ vanish when $x = a$ and also when $x = b$, show that its derived function $\phi(x)$, if also continuous, must vanish for some value of x between a and b Illustrate this geometrically

5. Give a method for determining the limiting value of the indeterminate form $\infty - \infty$ 6

$$\text{Ex } \tan x - \sec x \text{ when } x = \frac{\pi}{2}.$$

6 Prove that maxima and minima values occur alternately 12

Bisect a triangle by the shortest line possible

7 Explain the process of integration by substitution and show that— 10

$$\int_a^b \phi(x)\, dx = \int_{a'}^{b'} \phi(x) \frac{dx}{dz}\, dz.$$

Find by this method $\displaystyle\int \frac{2a + x}{a + x} \left(\frac{a - x}{a + x}\right)^{\frac{1}{2}} dx$

8 If $Q_n = \displaystyle\int \sin^n x\, dx$ 8

Prove that—

$$Q_n = -\frac{\cos x \sin^{n-1} x}{n} + \frac{n-1}{n} Q_{n-2}$$

9 Find the value of $\displaystyle\int_0^{\frac{\pi}{2}} \log \sin \theta\, d\theta$ Hence deduce the value of $\displaystyle\int_0^{\pi} \log \sin \theta\, d\theta$ 12

10 Integrate — 12

(1) $\displaystyle\int \sec x\, dx$

(2) $\displaystyle\int \frac{\tan (a + x)}{\tan (a - x)}\, dx.$

FRIDAY, 2ND DECEMBER.

[10 A.M. TO 1 P.M.]

DYNAMICS.

J. T. HATHORNTHWAITE, M.A. ; T. S. TAIT, M.A., B.Sc. ;
The Rev. C. F. H. JOHNSTON, M A. ;
FARDUNJI MANCHERJI DASTUR, M A.

[The figures to the right indicate full marks.]

1. Define *velocity* and *accelerating force.* 8

What number would represent the accelerating force of gravity if a mile were the unit of linear space and an hour the unit of time ?

2 A particle is projected vertically downwards from a height with a velocity of 10 feet per second and reaches the earth in half a minute. Supposing that gravity acts for the first five seconds, then ceases to act for the next five seconds, then acts for the next five and so on till the particle reaches the earth, what height will it have fallen through ? 8

3. Two balls move uniformly in one plane, find the velocity of their centre of gravity. 8

4 A weight of 16 lbs. rests on a smooth horizontal table, and a string attached to the weight passes over the table and hangs vertically downwards with a weight of 18 lbs. attached to it ; the system being allowed to move, find how far the hanging weight will descend in four seconds. 11

5. A body impinges directly on another, determine the velocities after impact. 11

Find the ratio of the weights of two perfectly elastic balls A and B so that after striking B at rest A may lose $\frac{1}{n}^{th}$ of its velocity.

6 Prove that the velocity of a projectile at any point of its path is equal to the velocity that would be acquired by the falling of the body under the action of gravity through the vertical distance between that point and the directrix of the parabolic orbit. 6

7. Investigate the range of a projectile on a horizontal plane through the point of projection. 15

A ball of elasticity e is projected from a point in a horizontal plane, if the distance of the point of nth impact be equal to 4 times the sum of the greatest altitudes of the ranges, determine the angle of projection

8 A heavy particle is projected from a given point A so as always to pass through another given point B which is not in the same horizontal line with A If S be the focus of its path, prove (geometrically if you can) that the locus of S is given by the equation AS — BS = constant. 12

9 An inelastic particle descends a smooth curve in a vertical plane under the action of gravity; find the velocity of the particle in any position. 10

10 A pendulum that beats seconds at the foot of Matheran is taken to the top of the hill and there loses 8 beats in 24 hours. Find the height of Matheran, assuming the radius of the earth to be 4,000 miles and the foot of the hill to be on the sea-level. 11

FRIDAY, 2ND DECEMBER.

[2 P.M. TO 5 P.M.]

HYDROSTATICS.

J T HATHORNTHWAITE, M.A; T. S. TAIT, M.A., B Sc.;

The Rev. C. F. H. JOHNSTON, M.A.;

FARDUNJI MANCHERJI DASTUR, M A.

[The figures to the right indicate full marks.]

1 Explain the equation $W = sV$. 8

What is the standard substance in this equation?

2. Define a *fluid* and prove that the pressure at any point of a fluid of uniform density is proportional to its depth below the surface of the fluid. 10

If the reservoir of the water-works of a town be 100 ft. above the level of a street, find the force necessary to restrain the plug in a pipe of which the section is a square inch at a height of ·82 ft. above the street.

3. A rhombus is just immersed in liquid with a diagonal vertical and from the highest point lines are drawn dividing the figure into three equal parts; show that— 16

$$\frac{\text{pressure on middle part}}{\text{pressure on either of the side parts}} = \frac{11}{8}.$$

4. Determine the conditions necessary to be fulfilled in order that a body may float in equilibrium. 12

A triangle ABC floats in water with its plane vertical, the angle B being in the surface and the angle A not immersed; find the density of the triangle in terms of its sides.

5. Prove *Boyle* and *Marriotte's Law* for dilatation of air. 10

Explain why if the tap of a beer-barrel nearly full and without a vent-peg be opened, the beer will begin to run out but will soon stop.

6. State the requisites of a *mercurial barometer* and describe the *aneroid barometer*. 8

What change of atmospheric pressure on the square inch is indicated by a fall of 1·1 inches, the density of mercury being 13?

7. Describe the construction and action of the *common pump*. 10

What is the greatest height to which it will raise water? Show how to modify its construction so that it may force water to any height.

8. Describe the *hydrostatic balance*, and show how to compare the specific gravities of a solid and a liquid by means of it. 8

9. Explain the action of the *condenser*. 8

If the capacity of the receiver be 10 times that of the barrel, after how many descents of the piston will the force of the compressed air be doubled?

10. Investigate the tension at any point of a spherical envelope which contains gas at a given pressure. 10

THURSDAY, 1ST DECEMBER.

[10 A.M TO 1 P.M]

ELEMENTARY PHYSICS—PAPER I.

The Rev D MACKICHAN, M.A., B D.;

The Rev. F DRECKMANN, S.J.

[The figures to the right indicate full marks.]

1 Enunciate the law of universal gravitation, and explain carefully the causes to which the variations of the force of terrestrial gravitation at different points of the earth's surface are due. 10

Calculate the number of seconds which would be lost per day by a correctly-going clock if it were taken to the summit of a mountain 4,000 feet above the sea-level.

2 State and prove the principle of Archimedes, and explain its application to the problem of determining the specific gravity of substances. 9

An ice berg floating freely in sea-water of specific gravity 1 027 is found to have a volume of 10,000 cubic metres above water · calculate the total volume of the ice-berg. [Specific gravity of ice = 0 94].

3 State the capillary phenomena and their laws. Explain clearly the theory which accounts for these phenomena by the laws of surface tension. 12

4. Define *momentum* and *kinetic energy*. Show from your definition that kinetic energy is proportional to the square of the velocity. 12

Describe what takes place when two inelastic and when two perfectly elastic bodies impinge upon each other. Prove that the kinetic energy of the system is diminished in the one case and not in the other. Explain what becomes of the kinetic energy that disappears.

5. Define *temperature, quantity of heat* and *absolute zero* of temperature. 12

Describe Bunsen's calorimeter, and explain how it is used.

6 Distinguish between the real and the apparent expansion of a liquid Describe and explain Dulong and Petit's method of determining the absolute expansion of mercury. 9

7. Describe how the elastic force of vapours may be experimentally determined and the existence of a maximum tension demonstrated. How is this maximum tension affected by temperature? State the laws which regulate the tensions of vapours in contact with other gases. 14

8 State briefly the effect of pressure on the boiling point and freezing point of water. 10

Explain these phenomena in accordance with the dynamical theory of heat

9 Explain what is meant by *electrostatic induction.* 12

Show how it may be experimentally proved that the quantity of electricity induced by a charged body is equal to the amount of the charge of the inducing body

Explain how the Leyden jar requires a greater quantity of electricity to charge it to any given tension than a simple conductor of the same dimensions

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THURSDAY, 1ST DECEMBER.

[2 P.M. TO 5 P M]

ELEMENTARY PHYSICS—PAPER II.

The Rev. D MACKICHAN, M A , B D. ;
The Rev F DRECKMANN, S J.

[The figures to the right indicate full marks]

1 Prove the identity of the radiating and absorbing powers of heat Is there any analogy to this in light? 12

How would you separate the thermal from the luminous rays of the sun so as to receive (*a*) the greatest amount of heat without light, and (*b*) the greatest amount of light with the least possible heat?

2 How does the intensity of radiant heat depend on the distance of the source of heat and on the obliquity of the rays? Give experimental proofs 10

3. What are the differences between the spectra produced by gratings and by prisms of crown and of flint glass? How can the ultra red and the ultra violet rays be made visible? 12

4 State the advantages of binocular vision over monocular Distinguish between optic and visual angle, and explain on what circumstances our estimation of the size and distance of objects depends. 12

5 Describe and explain the phenomenon of diffraction for monochromatic and white light, and show how to determine the wave length of light by means of the diffraction bands. 15

6 State Faraday's laws and Grothuss's theory of electrolysis How must the latter be modified to agree with the facts? 11

7 What are extra and secondary currents? How can the existence of the former be proved? Show why the intensity of the extra current of a coil is increased by introducing into the coil a bar of soft iron, or better still a bundle of iron wires? 14

8 Describe a Solenoid, and show how Ampère's Theory of magnetism may be deduced from a comparison of the solenoid with a magnet. 14

FRIDAY, 2ND DECEMBER.

[10 A M TO 1 P M]

INORGANIC CHEMISTRY—PAPER I.

I. B LYON, F C S.;

S. COOKE, M.A , F.I C., F G S , Assoc M Inst. C E.

[The figures to the right indicate full marks.]

1. One volume of carbonic oxide is mixed with two volumes of oxygen at standards and the mixture fired · what is the composition and properties of the product, and what volume will it occupy at 720 m m and 60°C? Will there be any residue of oxygen, and if so, how much? 12½

2 Describe three distinct methods for preparing nitrogen gas, expressing the reactions by equations and giving sketches of the apparatus employed. 12½

3 What are the natural sources of boracic acid? How is it prepared, and what are its uses and characteristic reactions. 12½

4. How does silicon occur in nature? Describe the various forms in which it has been prepared, and explain the chemistry of different processes. 12½

5. What substances are used for glazing pottery? 9

6. Mention the different allotropic forms of sulphur; state how they are obtained; and describe the uses to which this element is applied. 12½

How is volcanic sulphur supposed to be produced?

7. Describe the various forms of phosphoric acid, their preparation and properties. What is microcosmic salt, how is it made, and what are its uses? 12½

8. Describe the relationship between (1) the members of the halogen group of elements and (2) the members of the sulphur group. 16

FRIDAY, 2ND DECEMBER.

[2 P.M TO 5 P.M.]

INORGANIC CHEMISTRY—PAPER II.

I. B. LYON, F.C.S.;

S. COOKE, M.A., F.I.C., F.G.S., Assoc. M. Inst. C.E.

[The figures to the right indicate full marks.]

1. What reasons have you for believing certain metallic alloys to be true chemical compounds? Illustrate your answer by examples. 10

2. What compounds does ammonia gas form with sulphuric anhydride? How may their composition be explained? 10

3. State the composition of and describe the method of preparation and principal properties of— 18

1. Potassium chlorate.
2. Sodium hyposulphite.
3. Barium peroxide

4. Enumerate the principal varieties of glass, and state how they differ from one another. 10

5. Give a short account of the manufacture of cast-iron from clay iron stone, and state how cast-iron differs in physical and chemical properties from wrought iron. 15

6. Give a short description of any four metallic chromates. 12

7. Describe the compounds which lead forms with oxygen. 10

8. In what respects do arsenic and antimony resemble certain non-metallic elements? 15

THURSDAY, 1ST DECEMBER.

[10 A.M. TO 1 P.M.]

VEGETABLE ANATOMY AND PHYSIOLOGY, AND SYSTEMATIC BOTANY—PAPER I.

SAKHARAM ARJUN RAVUT, L.M.; J. MACGREGOR, M.D.

[The figures to the right indicate full marks.]

1. Describe the structure of a leaf with reticulated venation, marking the difference between the aerial and the submerged kinds. 15

2. Mention the subterranean modifications of the stem, and give examples. 15

3. Define indefinite inflorescence, and give the names and examples of the forms with elongated axis. 15

4. Define the following terms and give examples:— Polyadelphous, Hastate, Digitipartite, Balausta, Pulvinus, Bacca and Homotropous. 15

5. Mention the parts from without inwards as displayed on making a section of an orthotropous, arillate, albuminous seed, and give the position of the embryo. 20

6. Give the botanical characters of the Umbelliferæ and Apocynaceæ, with the scientific names of five common plants belonging to each order. 20

THURSDAY, 1ST DECEMBER.

[2 P.M. TO 5 P.M.]

VEGETABLE ANATOMY AND PHYSIOLOGY, AND SYSTEMATIC BOTANY—PAPER II.

SAKHARAM ARJUN RAVUT, L M.; J. MACGREGOR, M.D.

[The figures to the right indicate full marks.]

1. Mention the chief inorganic constituents of plants and the sources in nature whence they are derived. 20

2. What is meant by assimilation in plants? Give a brief account of the manner in which this process takes place, specifying the organs concerned in it. 20

3. What is meant by the artificial and natural systems of classification? Mention the advantages which the latter has over the former, and give the particulars on which the artificial system was founded by its author. 15

4. What are the principal kinds of hairs seen on plants? Describe the structure of the ramenta and the sting, mentioning the plants in which these are seen. 15

5. Describe the structure of an exogenous stem a year old, marking the parts through which the ascent of the sap occurs. 10

6. Give the physical and chemical properties of the sap, and mention the circumstances which influence the movement of this fluid. 20

FRIDAY, 2ND DECEMBER.

[10 A.M. TO 1 P.M.]

COMPARATIVE ANATOMY AND PHYSIOLOGY—PAPER I.

H. COOK, M.D; G. A. MACONACHIE, M.D.

[The figures to the right indicate full marks.]

1. What is the composition of the blood; in what manner are its various elements replenished, and how is its purity maintained? 25

2. What is meant by an "afferent" and an "efferent" nerve; to what tissues are these chiefly distributed; and what part do they severally take in any reflex action? 20

3. Describe the papillæ of the tongue; state what nerves are engaged in the sense of taste, and to what parts of the tongue they are distributed. 20

4. Describe the production and growth of bone in the young animal. 20

5. Examine and describe the microscopic specimens numbered 1, 2, 3, and 4. 15

FRIDAY, 2ND DECEMBER.

[2 P.M. TO 5 PM.]

COMPARATIVE ANATOMY AND PHYSIOLOGY—PAPER II.

H. COOK, M.D.; G. A. MACONACHIE, M.D.

[The figures to the right indicate full marks.]

1. Describe the skeleton of any bird 20

2. Describe the blood circulation of a bony fish, and compare it with the circulation of an oyster. 20

3. Describe the nervous, digestive and ambulacral systems of a star-fish and mention the relation that the last has with the skeleton of the animal. 20

4. Describe the process of alternation of generation as seen in the jelly fish. 20

5. Give the anatomy of a sponge. How does its reproduction take place? What is its position in the animal kingdom, and why? 20

V.

FIRST EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE.

EXAMINERS.

J. T. HATHORNTHWAITE, M.A.	In Mathematics.
T S TAIT, M A., B.Sc.	
The Rev. C. F. H. JOHNSTON, M.A. ..	
FARDUNJI MANCHERJI DASTUR, M.A. ...	
I B. LYON, F.C.S.	In Chemistry.
S COOKE, M.A.	
The Rev. D. MACKICHAN, M.A., B.D. ..	In Experimental Physics.
The Rev. F. DRECKMANN, S.J. .	
G. A. MACONACHIE, M.D., C.M. ..	In Biology.
SAKHARAM ARJUN RAVUT, L M. ..	
J. MACGREGOR, M.D.	

WEDNESDAY, 9TH NOVEMBER

[10 A.M. TO 1 P.M.]

TRIGONOMETRY.

J. T. HATHORNTHWAITE, M.A ; T. S. TAIT, M.A., B.Sc ;
The Rev. C. F. H JOHNSTON, M.A. ;
FARDUNJI MANCHERJI DASTUR, M.A.

(*The same as set for the First B.A. Examination. See p. xcix.*)

WEDNESDAY, 9TH NOVEMBER.

[2 P.M. TO 5 P.M.]

STATICS.

J. T. HATHORNTHWAITE, M.A. ; T. S. TAIT, M.A., B.Sc.;
The Rev. C F. H. JOHNSTON, M.A. ;
FARDUNJI MANCHERJI DASTUR, M.A.

(*The same as set for the First B.A. Examination. See p. c.*)

MONDAY, 7TH NOVEMBER.

[10 A.M. TO 1 P.M.]

INORGANIC CHEMISTRY—PAPER I.

I. B. LYON, F.C S., F.I.C. ;

S. COOKE, M.A., F.G S., ASSOC. M. Inst. C.E.

[The figures to the right indicate full marks.]

1. Distinguish between molecular attraction and chemical affinity. In what respects do they agree and how do they differ? 5

2. Calculate the vapor densities of the following bodies:— ice, ammonia, carbonic oxide, sulphuretted hydrogen, ferric chloride. 10

3. Explain the exact meaning of the terms electro-positive and electro-negative when applied to the chemical elements. 5

4. Give a brief outline of the crystallographic systems, and describe the principal laws of symmetry. 15

5. Briefly describe the principles on which the methods of spectrum analysis are based. 10

6. Explain what is understood by the terms, salt, compound radicle, rational formula, atomicity, atomic heat. 10

7. Calculate the percentage composition of a substance which is molecularly represented by the formula $Ca(H_4.PO_4)_2$. 10

8. Try to account for the spontaneous combustion of heaps of charcoal; and calculate the amount of heat which would be evolved by the complete combustion of 1,280 kilograms of pure carbon in the atmosphere. 15

9. Write a note on the phenomena of combustion and illumination by incandescence and flame, stating the different theories which have been put forward to explain these phenomena. 10

MONDAY, 7TH NOVEMBER.

[2 P.M. TO 5 P.M.]

INORGANIC CHEMISTRY—PAPER II.

I. B. LYON, F.C.S., F.I.C.;

S. COOKE, M.A., F.I.C., F.G.S., Assoc. M. Inst. C.E.

[The figures to the right indicate full marks.]

1. What is the composition of the atmosphere? Indicate briefly how the relative amount of the substances constantly present in it may be ascertained, and state also how the presence of its chief accidental impurities may be detected? 16

2. Describe the preparation, composition and properties of phosphoretted hydrogen gas. 8

3. What is the action of nitric acid on the following metals (*a*) mercury, (*b*) tin, and (*c*) bismuth. Explain what occurs when water is added to the product of the action of nitric acid on metallic bismuth. 16

4 What is the action of heat upon the following substances :— 16

Mercurous chloride.
Barium nitrate
Ferric oxide
Ammonium magnesium orthophosphate.

5 Describe the preparation, properties and composition of the carbonates of ammonium 10

6. State what you know about the cuprous salts 10

7 Give a short description of the Bessemer Steel Process 10

8 Describe the composition, preparation and properties of the principal lead compounds used as pigments. 14

TUESDAY, 8TH NOVEMBER.

[10 A M TO 1 P.M.]

EXPERIMENTAL PHYSICS—PAPER I.

The Rev D MACKICHAN, M A , B.D ;
The Rev F DRECKMANN, S.J

[The figures to the right indicate full marks]

1 Define Mass and Weight Describe and analyse fully Newton's experiment by which he proves that weight is proportional to mass What is the meaning of the equation $W = Mg$? 10

2 Define Elasticity and Modulus of Elasticity. Is India-rubber a highly elastic substance ? 12

The modulus of elasticity of silver being 7,400, by how much will a silver wire 2 metres long and 4 sq millimetres in section be elongated by a stretching weight of 5 kilogrammes ?

3 From the construction and action of the air-pump obtain an expression for the density of the air in the receiver after any given number of strokes. 14

In an air pump, the receiver of which has a capacity of one litre, three strokes reduce the pressure from 768 millimetres to 324 millimetres ; when a body has been placed in the receiver it is found that in order to reduce the pressure from 729 millimetres to 144 millimetres, four strokes are required ; find the volume of the body.

4. Explain carefully the nature of wave-motion. Define in the case of sound waves *wave-length*, *phase* and *amplitude* of vibration; distinguish between *fundamental tone* and *overtones*. On what physical properties of a sound-wave do the *pitch*, *intensity* and *character* or *timbre* of a sound depend? 12

5. Describe the nature of longitudinal vibrations (*a*) in a rod fixed at both ends, (*b*) in a rod fixed at one end and free at the other, (*c*) in a rod free at both ends and fixed at its middle point with regard to time of vibration, nodes and ventral segments. 14

6. Explain how the velocity of sound in air is affected by temperature. 12

A stone is dropped into a well and the report of its striking the water is heard after 5 seconds: assuming the velocity of sound in air at 0°C to be 333 metres per second and the temperature of the air in the well to be 27·3°C, find the depth of the well.

7. The coefficient of real expansion for mercury being 0·018 and that of cubical expansion for glass 0·0026 for 100 degrees centigrade, find the height at 80°C of the column of mercury in a thermometer, the bulb of which contains 1,000 cub. millimetres and the stem of which is one sq. millimetre in section, when the mercury exactly fills the bulb at 0°C. 14

8. Compare the elevation of temperature in a rain-drop which falls from a height of one mile and in a leaden bullet which strikes a target with a velocity of 500 metres per second, supposing that in both cases the heat generated is not imparted to the surrounding bodies and neglecting the resistance of the air. [Specific heat of lead = 0·0314.] 12

TUESDAY, 7TH NOVEMBER.

[2 P.M. TO 5 P.M.]

EXPERIMENTAL PHYSICS—PAPER II.

The Rev. D. MACKICHAN, M.A., B.D.;
The Rev. F. DRECKMANN, S.J.

[The figures to the right indicate full marks.]

1. Describe two methods of imparting permanent magnetism to a steel bar. How can the bar be demagnetized, and what takes place if a magnet is broken in two? Which is the best method of magnetizing a compass-needle, and why? 12

2. Find the action of two magnetic poles on each other by the method of oscillations, and explain why the action of the earth on a magnetic needle is only directive. Describe any astatic arrangement. 12

3. State the laws of electric attraction and repulsion, and thence prove that the electric tension is proportional to the square of the density. 15

Two metallic spheres, one of 48 square decimetres surface charged with negative electricity of density 3, the other of 8 square decimetres surface charged with positive electricity of density 4 are brought into contact: which kind of electricity will be left on them, and what will be its density?

4. Describe the Tangent galvanometer and its use, and show how to compare it with the voltameter. 12

5. How would you arrange 12 Bunsen's elements for maximum current, supposing the electromotive force of each element to be 800, its resistance 10, the resistance of the external circuit 15; and what will be the strength of the current? 10

6. Arrange in thermo-electric order:—*iron*, *bismuth*, *antimony*, *copper*. 12

Describe Peltier's cross. What principle does it illustrate?

7. State the laws of refraction of light and define *index of refraction*, *total reflexion*, *critical angle*. Describe and explain the phenomenon called *mirage*. 12

8. What are *real*, *virtual*, *principal*, *conjugate* foci in mirrors? 15

State the formula for conjugate foci in concave spherical mirrors, and apply this formula to ascertain the position of the image for the various positions of the object.

THURSDAY, 10TH NOVEMBER.

[10 A.M. TO 1 P.M.]

BIOLOGY—PAPER I.

G. A. MACONACHIE, M.D., C.M.;

SAKHARAM ARJUN RAVUT, L.M.; J. MACGREGOR, M.D.

[The figures to the right indicate full marks.]

1. Give an account of the *mucor mucedo*, mentioning its habitat, its naked-eye appearance, and make a rough figure of its appearance under the microscope. 10

2. Give a description of the terminal growing bud of a stone-wort, the manner in which the cortical layer is formed, and the mode or modes in which the species is propagated. 20

3. Mention the vegetative and reproductive organs of a plant with their several parts, and make a list of all those parts of a plant which may be referred to modified leaves. 20

4. Describe the changes which occur in an ovule after its appearance in the ovary, marking separately those that occur before and after fecundation. 20

5. Describe the manner in which a dicotyledonous stem increases in its dimensions, mentioning the particular structure that is concerned in this process, its position, and its microscopic appearance. 15

6. Describe a vegetable cell, and mention its contents in the young and the mature state. 15

THURSDAY, 10TH NOVEMBER.

[2 P.M. TO 5 P.M.]

BIOLOGY—PAPER II.

G. A. MACONACHIE, M D., C.M. ;

SAKHARAM ARJUN RAVUT, L.M. ; J. MACGREGOR, M D.

[The figures to the right indicate full marks.]

1. To what class and order of the Protozoa does the Amæba belong? In what points does it resemble the Vorticella and differ from the Hydra? 20

2. Describe the Common Snail (Helix). What are the chief points which distinguish it from the Lamellibranchiate molluscs. 30

3. Describe the heart and circulation of a frog. What changes take place in the circulation during the life of the animal? 20

4. What is seen on examining a dry transverse section of bone under the microscope? 10

5. Describe the specimens seen under the microscope. 20

VI.

EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE.

EXAMINERS.

J. T. HATHORNTHWAITE, M.A. T. S. TAIT, M.A., B.Sc. The Rev. C. F. H. JOHNSTON, M.A. FARDUNJI MANCHERJI DASTUR, M.A.	In Mathematics.
The Rev. D. MACKICHAN, M.A., B.D. The Rev. F. DRECKMANN, S.J.	In Experimental Physics.
I. B. LYON, F.C.S. ... ... S. COOKE, M.A.	In Chemistry.
SAKHARAM ARJUN RAVUT, L.M. ... J. MACGREGOR, M.D.	In Botany.
G. A. MACONACHIE, M.D., C.M. ...	In Zoology.
H. COOK, M.D.	In Animal Physiology
S. COOKE, M.A.	In Geology.

MONDAY, 14TH NOVEMBER.

[10 A M TO 1 P.M]

ALGEBRA AND PLANE AND SPHERICAL TRIGONOMETRY.

J. T. HATHORNTHWAITE, M.A.; T. S. TAIT, M.A., B.Sc.;
The Rev. C. F. H. JOHNSTON, M.A.;
FARDUNJI MANCHERJI DASTUR, M.A.

[The figures to the right indicate full marks.]

1. Assuming the truth of the *Binomial theorem* when the exponent is any positive quantity, prove its truth when the exponent is any negative quantity. 10

Prove that $\sqrt{\frac{a+x}{a-x}} = 1 + \frac{x}{a+x} + \frac{3}{2}\left(\frac{x}{a+x}\right)^2 + \frac{5}{2}\left(\frac{x}{a+x}\right)^3 + \&c.$

2. Prove that in a scale whose radix is r the sum of the digits of an integer divided by $r-1$ will leave the same remainder as the integer leaves when divided by $r-1$. Hence explain the arithmetical proposition known as "*casting out the nines.*" 10

3. Prove that the arithmetical mean of any number of positive quantities is greater than the geometrical mean. 10

If $x + \frac{2}{x} > 3$ prove that $x + \frac{2}{x^2} > 3$.

4. Enunciate the *Exponential theorem*. 12

Hence show that $(\log_e x)^2 = (x-1)^2 - (x-1)^3 + \frac{11}{12}(x-1)^4 - \&c.$

5. Prove that in any plane triangle— 10

$$4s(s-a)(s-b)(s-c) = abc\left\{a\cos B\cos C + b\cos C\cos A + c\cos A\cos B\right\}.$$

6. If x, y, z be the lengths of the straight lines which join the centre of the circle inscribed in the triangle ABC with the centres of the circles described on the sides a, b, c respectively, prove that— 10

$$x\cos\frac{A}{2} = a;\ y\cos\frac{B}{2} = b;\ z\cos\frac{C}{2} = c.$$

7. Find the sum of n terms of the series— 9

$$\cos^2\theta + \cos^2 3\theta + \cos^2 5\theta + \cos^2 7\theta + \&c.$$

8. Express the cosine of an angle of a spherical triangle in terms of the sines and cosines of the sides 9

9. State *Napier's Rules of Circular Parts*, and from the Rules deduce all the formulæ necessary for the solution of quadrantal triangles. 9

10. Prove that in any spherical triangle— 11

$$\text{if } \sec^2 \frac{B+C}{2} \cos \frac{b+c}{2} = \operatorname{cosec}^2 \frac{A}{2} \cos \frac{b-c}{2}$$

$$\text{then } 1 + \cos a = \cos b + \cos c$$

$$\text{and } \cos A + \tan \frac{b}{2} \tan \frac{c}{2} = 0.$$

CONIC SECTIONS,

J. T. HATHORNTHWAITE, M.A.; T. S. TAIT, M.A., B.Sc.;
The Rev. C. F. H. JOHNSTON, M.A.;
FARDUNJI MANCHERJI DASTUR, M.A.

[The figures to the right indicate full marks.]

1. The tangent at a point P of a conic intersects the directrix in Z and latus-rectum produced in K; show that the ratio of SK to SZ is equal to the eccentricity. 8

2. In a parabola prove that— 8

$$ST = SP = SG.$$

If the ordinate of P bisect the subnormal of P′, show that the ordinate of P is equal to the normal of P′.

3. Prove that the sum of the squares of conjugate diameters of an ellipse is constant. When is the sum of conjugate diameters the least? 10

4. Show that the circle which passes through the foci and any point on an ellipse passes also through the points in which the tangent and normal at that point meet the minor axis. 8

5. If tangents be drawn at the vertices of the axes of an hyperbola, show that the diagonals of the rectangle so formed are asymptotes to the four curves. 10

Prove that the perpendicular drawn from a focus to an asymptote intersects it in the corresponding directrix.

6. Investigate the condition that the equation— 10

$$Ax^2 + Bxy + Cy^2 + Dx + Ey + F = 0$$

may represent a pair of straight lines. What additional condition must be satisfied that the lines may be at right angles to each other?

7. Interpret the equation— 9

$$ky = 2a\,(h + x)$$

according to the position of the point (h, k), and illustrate your remarks with diagrams.

Determine the geometrical signification of the equation—

$$hy^2 = 2x\,(ky - 2ax).$$

8. Investigate the equation to an ellipse referred to conjugate diameters as axes. 10

Find the locus of the middle points of chords which join the extremities of conjugate diameters.

9. Find the equation to an hyperbola referred to the asymptotes as axes. 12

The angles of a triangle lie upon an equilateral hyperbola; show that the point of intersection of the perpendiculars drawn from the angles to the opposite sides is also on the curve.

10. Investigate the polar equation to a chord of a conic, the focus being the pole. 15

Chords of a conic subtend a constant angle at the focus; prove that the locus of the foot of the perpendicular dropped from the focus upon the chord is a circle, except in a particular case when it becomes a straight line.

DIFFERENTIAL AND INTEGRAL CALCULUS.

J. T. HATHORNTHWAITE, M.A.; T. S. TAIT, M.A., B.Sc.;
The Rev. C. F. H. JOHNSTON, M.A.;
FARDUNJI MANCHERJI DASTUR, M.A.

[The figures to the right indicate full marks.]

1. If $y = \phi\,(x)$ be the equation to a curve, assign a geometrical meaning to $\phi'\,(x)$ and interpret the equation— 6

$$\frac{du}{dx} = \phi(x)$$

2. Enunciate and prove *Taylor's theorem.* 11

In what class of cases does the theorem fail?

3. Show how to find the limiting value of an expression which assumes the indeterminate form 0^0, α^0 or 1^α. 8

Evaluate $(1 + ax)^{\frac{b}{x}}$ when $x = 0$ and when $x = \alpha$.

4. Inscribe the greatest possible rectangle in a given semi-ellipse which is bounded by the minor axis. 8

5. Investigate the equation to the normal at a given point of a curve. 13

If the normal to the curve $x^{\frac{2}{3}} + y^{\frac{2}{3}} = a^{\frac{2}{3}}$ make an angle ϕ with the axis of x, show that its equation is—

$$y \cos \phi - x \sin \phi = a \cos 2\phi.$$

6. Find the value of—

$$(1) \int_{\frac{b-a}{2}}^{b} \frac{dx}{\sqrt{(a+x)(b-x)}} \qquad (2) \int_0^{\frac{\pi}{2}} \sin^6\theta \cos^5\theta \, d\theta.$$

7 Investigate the limiting value of the expression— 10

$$\left\{\left(1 + \frac{a}{n}\right)\left(1 + \frac{2a}{n}\right) \cdot \ldots\ldots\ldots \cdot \left(1 + \frac{n-1}{n} a\right)\right\}^{\frac{1}{n}}$$

when n becomes indefinitely great.

8. What is meant by the *principal value* of $\int_a^b \phi(x)\, dx$ when $\phi(x)$ becomes infinite for a value of x ($= c$) intermediate to a and b? 8

Find the principal value of $\int_0 \frac{2a\, dx}{(x-a)^2 (x-a)^{\frac{2}{3}}}$

9. Find the length of the arc of a parabola intercepted by the latus-rectum. 13

10. How do you find the area of a curve whose equation is expressed in polar co-ordinates? 15

Investigate the area of a loop of the curve—

$$r^2 = a^2 \sin^2 2\theta.$$

TUESDAY, 15TH NOVEMBER.

[2 P.M. TO 5 P.M.]

STATICS AND HYDROSTATICS.

J. T. HATHORNTHWAITE, M.A.; T. S. TAIT, M.A., B.Sc.;
The Rev. C. F. H. JOHNSTON, M.A.;
FARDUNJI MANCHERJI DASTUR, M.A.

[The figures to the right indicate full marks.]

1. A particle which rests upon a parabola ($y^2 = 4ax$) is acted on by forces parallel to the axes and equal to $px^2 - py^2$ respectively; find the position of equilibrium. 12

2. Define a *couple*, and prove that its effect is not altered by turning its arm through any angle about one extremity in the plane of the couple. 8

3. Find the centre of gravity of the quadrant of an ellipse. 10

4. Enuncjate *Guldinus's properties*, and hence deduce the centre of gravity of the area and of the arc of a semicircle. 10

5. Find the ratio of the power to the weight on a rough crew when they are in equilibrium. 8

6. A heavy uniform rod rests with one end on a fixed smooth inclined plane (angle a) and with the other on a rough horizontal floor. When the rod is on the point of sliding, find its angle of inclination to the horizon. 12

7. Define a *fluid*, and state what the fundamental property of a fluid is. Show that the pressure at any point of a heavy fluid at rest is the same in all directions. 8

8. Describe the *common pump*, and find the height through which the water rises during one stroke of the piston. 8

9. A quadrant of a circle AOB whose centre is O is immersed vertically in liquid so that OA is in the surface. If C be the middle point of OA and CD be drawn perpendicular to OA to meet the curve in D, prove that the whole pressure on the sector AOD is equal to the whole pressure on the sector BOD. 12

10. A conical vessel whose height is 32 feet and semi-vertical angle 30° is filled to half its depth with liquid; find how many times in a second it must revolve about its vertical axis in order that the liquid may just reach the rim of the vessel. 12

WEDNESDAY, 16TH NOVEMBER.

[10 A.M. TO 1 P.M.]

DYNAMICS.

J. T. HATHORNTHWAITE, M.A.; T. S. TAIT, M.A., B.Sc.;
The Rev. C. F. H. JOHNSTON, M.A.;
FARDUNJI MANCHERJI DASTUR, M.A.

[The figures to the right indicate full marks.]

1. When a point moves in a plane curve express its component accelerations at any instant along and perpendicular to the radius vector drawn from a fixed point in the plane of the curve. 10

2. One particle moves uniformly in a straight line while a second particle moves uniformly in a circle about the first as centre; determine the absolute path of the second particle, the motion being in one plane. 10

3. Investigate the equation to the parabolic trajectory. 12

A projectile is thrown from the top of an inclined plane of base a and height b; find the direction of projection in which the *least* velocity will bring it exactly to the bottom of the plane.

4. A set of 5 imperfectly elastic balls of the same substance whose masses form a G. P. of ratio 2 are in a row and the 1st strikes the 2nd, the 2nd consequently the 3rd and so on. The elasticity being $\frac{1}{2}$, compare the velocity of the 1st with that communicated to the 5th. 8

5. A particle moves in a straight line under the action of a force always directed to a point in that line and varying inversely as the square of the distance from that point; determine the motion. 10

6. The plane of a circle being vertical and any number of chords being drawn to the lower extremity of the vertical diameter; find the locus at any instant of time of any number of heavy particles which start simultaneously from the upper extremities of the diameter and chords. 13

7. Determine the motion of two bodies of masses m and m' connected by a string which passes over a fixed smooth pully. 13

If $m = 3m'$ and m impinge on a horizontal plane after descending through g feet; show that four seconds will elapse before the system comes to a state of permanent rest.

8. The velocity of a body falling to a centre of force varies as $\left(\frac{a-x}{x}\right)^{\frac{1}{2}}$ where a is the initial and x the variable distance from the centre; find the law of force. 6

9. Investigate the law of force perpendicular to an axis that a free particle may describe a conic section. 12

10. A string will just bear a weight of 16 lbs. without breaking and a weight of ½ lb. is attached to it and whirled round in a horizontal circle of radius 2 ft.; find the number of revolutions the weight must make in a second in order to break the string. 6

WEDNESDAY, 16TH NOVEMBER.

[2 P.M. TO 5 P.M.]

ELEMENTARY GEOMETRICAL OPTICS AND ASTRONOMY.

J. T. HATHORNTHWAITE, M.A.; T. S. TAIT, M.A., B.Sc.;
The Rev. C. F. H. JOHNSTON, M.A.;
FARDUNJI MANCHERJI DASTUR, M.A.

[The figures to the right indicate full marks.]

1. Prove the truth of the formula $\frac{1}{u} + \frac{1}{v} = \frac{2}{r}$, and by means of it trace the relative change of position of the conjugate foci of a reflected pencil. 10

2. A pencil of rays is refracted directly through a sphere; find the geometrical focus of the emergent pencil. 10

3. Sketch and describe the *Astronomical Telescope* and *Herschel's Telescope*, in each case tracing the path of rays of light from a star to the eye of the observer. 10

4. A fish is seen at the bottom of a pool z feet deep by a man whose eye is vertically above the fish and distant h feet from the surface of the water. He then moves his head parallel to the surface of the water till his eye is d feet from its former position and still sees the fish, his line of vision now making an angle ϕ with the normal to the water. If μ be the index of refraction prove that— 12

$$(d - h \tan \phi) \sqrt{\mu^2 - \sin^2\phi} = z \sin \phi.$$

5 The refracting angle of a prism is 60° and the refractive index $\sqrt{3}$; find the minimum deviation. 8

6 Explain and illustrate, where necessary, by means of diagrams the following astronomical terms— 10

Azimuth, right ascension; prime vertical; nonagesimal; parallax, precession of the equinoxes.

7 What do you infer about the moon's motion from the fact that it always presents very nearly the same face to an observer? 10

Sketch what you consider to be the moon's path round the sun.

8 When does an *annular* eclipse of the sun take place? Can there be an annular eclipse of the moon? Account for the coppery appearance the moon sometimes presents during an eclipse 8

9 What is meant by a *sidereal year*, a *tropical year*, and an *anomalistic year?* Explain clearly why they are of different lengths, and state how the *civil year* depends upon one of them. 10

10. Explain what is meant by *aberration*, and give a geometrical proof that the effect of aberration is to make the stars when referred to the celestial sphere describe small ellipses about their true places. 12

FRIDAY, 18TH NOVEMBER.

[10 A.M. TO 1 P.M.]

EXPERIMENTAL PHYSICS—PAPER I.

The Rev. D MACKICHAN, M.A., B.D.;

The Rev. F. DRECKMANN, S.J.

[The figures to the right indicate full marks.]

1. State the laws relating to friction. Why is rolling friction less than sliding friction between the same sub- 14

stances? By how much is the friction on the axle of a wheel reduced by placing it on friction-wheels instead of directly on its bearings, the radius of each friction-wheel being 3 centimetres, that of its axle 1·5 millimetre and the three axles being equidistant from each other?

2. Explain Faucault's experiment to prove the rotation of the earth, and show that the apparent rotation of the plane of oscillation of the pendulum is 15 sin ϕ per hour, where ϕ is the latitude of the place. 12

3. What is the surface tension of a liquid and to what is it due? Show that in convex surfaces it is greater and in concave surfaces less than in plane surfaces. 14

State the capillary phenomena and their laws. Explain the form of the meniscus and prove theoretically that the capillary elevation and depression are due to surface tension, and show how the same may be proved experimentally.

4. State the corrections to be applied to a mercurial barometer. Two barometers of the same length and cross section contain each a small quantity of air; their readings are at one time h and k, at another time h' and k'; compare the quantities of air in the tubes. 12

5. Describe accurately the path of a particle acted on by two waves at right angles to each other, the amplitude and time of vibration being the same in both, when the phases differ by 0, $\frac{1}{8}t$, $\frac{2}{8}t$, $\frac{3}{8}t$, &c., up to t, where t is the time of vibration. 14

6. What is meant by *temperament* in music? Distinguish between the two kinds. 14

Define *tone, semitone, major third, minor third*, and compare the intervals of the major third in the diatonic and chromatic scales.

7. What are *beats?* To what are they due and how are they used to bring two tuning forks into accurate unison? 8

8. Explain how sound is produced in an organ pipe, and analyse the relation of the length of the pipe to the pitch of the note in an open and in a closed pipe. 12

FRIDAY, 18TH NOVEMBER.

[2 P.M. TO 5 P.M.]

EXPERIMENTAL PHYSICS—PAPER II.

The Rev. D. MACKICHAN, M.A., B.D.;
The Rev. F. DRECKMANN, S.J.

[The figures to the right indicate full marks].

1. Define co-efficient of expansion. Describe accurately any one method of determining the linear expansion of solids. 12

A Harrison's gridiron seconds pendulum consists of five bars, three of iron and two of zinc · calculate the length of the zinc bars, the co-efficient of expansion of iron being 0·000012, for zinc 0 00003 for 1°C and the length of the seconds pendulum 0·99 metre.

2. Enunciate and show how to prove by experiment the laws which regulate the intensity of radiant heat. State Newton's law of cooling, and show how it has been modified by the researches of Dulong and Petit. 12

3. Enunciate the two laws of Thermodynamics. Explain what is meant by Carnot's function and a *reversible* engine? 14

4. Explain the formation of multiple images of an object placed between two mirrors inclined to each other at any angle. 10

Find the number of images formed when the angle between the mirrors is 80° and find the positions of the point for which there are five images.

5. What is meant by the *minimum deviation* of a ray of light passing through a prism. Show how to calculate the refractive index of a prism by means of the minimum deviation. 14

If the angle of a prism be 60° and the refractive index $\sqrt{2}$ find the minimum deviation.

6. State briefly the undulatory theory of light. Show how the phenomena of refraction can be explained on this theory, and how the corpuscular theory fails to account for them. 14

Give the physical meaning of *index* of *refraction.*

7. Distinguish between an ordinary and a polarised ray of light. What is meant by the *polarising* angle? 10

Explain the construction and use of the Nicol prism.

8. Define the following terms relating to double refraction in crystals :—*optical axis, principal section, ordinary* and *extraordinary ray, positive* and *negative crystals.* 14

Explain the phenomena exhibited by a uniaxial crystal in connection with polarised light.

SATURDAY, 19TH NOVEMBER.

[10 A.M. TO 1 P.M.]

EXPERIMENTAL PHYSICS—PAPER III.

The Rev. D. MACKICHAN, M.A., B.D.;

The Rev. F. DRECKMANN, S.J.

[The figures to the right indicate full marks.]

1. State the corrections to be applied to the inclination and declination compass. 12

To determine approximately the dip by means of a simple inclination needle without divided circle the needle is first placed at right angles to the magnetic meridian and the time which it takes to make 100 oscillations is accurately observed; it is then placed in the magnetic meridian and in this position the number of oscillations during the same time is between 141 and 142, how can the dip be found?

2. Prove that the horizontal force of the earth's magnetism in absolute measure is $\frac{\pi}{t}\sqrt{\frac{k}{r^3 \tan a}}$ when t is the time of oscillation of a magnetic bar, k its moment of inertia, r its distance from a small magnetic needle, a the deflection from the magnetic meridian of this needle under the action of the magnetic bar. 16

3. How do you account for the presence of electricity in the atmosphere and in the clouds? How do you explain the fact that the clouds are sometimes *positively* and at other times *negatively* electrified? 9

4. State Faraday's theory of induction and show how to prove the polarization of the medium. 14

Define *conductive power* and *specific* inductive capacity and show how the latter was determined by Faraday.

5. Describe and analyse Volta's fundamental experiment in support of the contact-theory. 14

Does this theory agree with the principle of the conservation of energy or how must it be modified so as to agree with it?

Is the chemical action in a pile the cause of the electric current or *vice versâ?* Give the reason for your answer.

6. Explain the enfeeblement of the current in elements with a single liquid and show how this is prevented in constant batteries. 10

What are the advantages of amalgamating the zinc used in a battery?

7. Give a symbolical representation of the chemical processes in a Daniell's element when the circuit is closed, and calculate its calorific effect for every 65 grammes of zinc dissolved in sulphuric acid. 16

[Zn = 65, Cu = 63·5, heat evolved by the combination of one gramme of zinc with oxygen = 1301, heat evolved by the combination of one gramme of copper = 602, heat of solution of one gramme of Zn O in $H_2 SO_4$ = 255, of one gramme of Cu O in $H_2 SO_4$ = 194].

8. State and explain the action of the earth on horizontal and vertical currents. How is a current rendered *astatic?* 9

MONDAY, 14TH NOVEMBER.

[10 A.M. TO 1 P.M.]

CHEMISTRY—PAPER I.

I. B. LYON, F.C.S.;

S. COOKE, M.A., F.I.C., F.G.S., Assoc. M. Inst. C.E.

[The figures to the right indicate full marks.]

1. Explain, giving examples, what you understand by the terms *acid, alkali, base, salt, compound radicle.* What is the modern criterion of an acid body? 6

2. The atomic weight of an elementary substance is required to be determined, describe how you would proceed to do so. Give the atomic weights of mercury, zinc, phosphorus, tin and arsenic. Which of these elements have abnormal vapor densities, and in what respects are they abnormal? 15

3. State, accurately, what is meant by the *degree of hardness* of a water, and describe the method by which it is experimentally determined, giving *full* details. 8

4. Describe the processes employed in converting heavy spar into barytic water, and mention the chief uses of the latter in chemical analysis. 8

5. Give a list of the ores of zinc, copper and lead and indicate their composition by chemical formulæ. Describe briefly how these metals are extracted. 18

6. Give the re-actions between— 15

(a) Ferrous chloride and potassic permanganate.

(b) Ferrous chloride and potassic bichromate, and explain how these re-actions are employed in the laboratory in determining iron quantitatively.

7. Carbonate of calcium is considered to be tri-morphous: what are the names and crystalline forms of the minerals which justify this opinion? 10

8. Explain how, by the chemical examination of a limestone, you could predict whether or not it would yield an hydraulic lime after burning. 10

9. How would you prepare hydrofluosilicic acid? What metals are sometimes separated by its solution, in analysis? Give the re-actions. 10

MONDAY, 14TH NOVEMBER.

[2 P.M. TO 5 P.M.]

CHEMISTRY—PAPER II.

I. B. LYON, F.C.S., F.I.C.;

S. COOKE, M.A., F.I.C., F.G.S., Assoc. M. Inst. C.E.

[The figures to the right indicate full marks.]

1. Briefly describe the methods employed for ascertaining the percentage of nitrogen in organic substances. 8

2. Describe generally how after having ascertained the percentage composition of an organic substance you would proceed in order to determine its molecular formula— 10

(a) When the substance is an organic acid.

(b) When the substance is an organic base.

3. What are (1) Glucosides, (2) Glycols, (3) Ketones. Illustrate your answer by examples. 12

4. What is chloroform? How is it prepared on the large scale? What relation does it bear to chloral, and how may it be obtained from that substance? 10

5. What are fat oils? How do they differ in composition and properties from other oils? 10

6. Name, formulate, and classify the organic acids most commonly found in fruits. 10

7. By what re-actions is hydrocyanic acid distinguishable? State carefully the composition of the substances which, when formed in these re-actions, indicate the presence of this acid. 10

8. State what you know in regard to the derivation and molecular constitution of the following substances:— 25

1. Aniline.
2. Uric acid.
3. Acrolein.
4. Cacodyl.
5. Alizarin.

9. What are the chief chemical points of difference between quinine and cinchonine?

THURSDAY, 17TH NOVEMBER.

[10 A.M. TO 1 P.M.]

BOTANY—PAPER I.

SAKHARAM ARJUN RAVUT, L.M.; J. MACGREGOR, M.D.

[The figures to the right indicate full marks.]

1. Describe the substance called Cellulose, and state the place it occupies in the vegetable structure. 20

2 Give the theory of Placentation, and name examples illustrating its principal modifications. 20

3. What is meant by Æstivation? Describe valvate, imbricate, and induplicate Æstivation, and give drawings of each of them. 10

4. Define the terms Endocarp, Papilionaceous, Diadelphous, Parenchyma and Vernation. 10

5. What are the different modifications of the Stem? 20

6. Give essential characters of the Rubiaceæ and Scitamineæ with Botanical names of four plants belonging to each of them. 20

THURSDAY, 17TH NOVEMBER.

[2 P.M. TO 5 P.M.]

BOTANY—PAPER II.

SAKHARAM ARJUN RAVUT, L.M. ; J. MACGREGOR, M.D.

[The figures to the right indicate full marks.]

1. Describe the function of "exhalation in plants." 10

2. What are the conditions essential to the germination of seeds? Describe the phenomena of this process in Monocotyledons. 20

3. State what is known of the movements of fluids in the interior of plants, both partial and general. 15

4. Describe the phenomena of impregnation in Ferns. 15

5. Mention the sources whence plants derive their nitrogen, in connection both with the air and the soil. 20

6 Give the various modes in which flowers are fertilized, and explain the phenomena of Dimorphism. 20

MONDAY, 14TH NOVEMBER.

[10 A.M. TO 1 P.M.]

ZOOLOGY—PAPER I.

G. A. MACONACHIE, M.D.

[The figures to the right indicate full marks]

1. Name and give an account of the structure of any Infusorian you please. 20

2. Describe the common Hydra. 20

In what class do you arrange it and for what reasons.

3. Mention the more important characters of the Rotifera. 20

4. Describe the Lepidoptera and give their life history. 20

5. Mention the characters of the Cephalopoda that distinguish them from the other orders of Mollusca. 20

MONDAY, 14TH NOVEMBER.

[2 P.M. TO 5 P.M.]

ZOOLOGY—PAPER II.

G. A. MACONACHIE, M.D.

[The figures to the right indicate full marks.]

1. Describe a typical vertebra. What are the regions of the vertebral column in birds, and how do they differ from the corresponding regions in an ordinary mammal? 20

2. Give an account of the Dipnoi and notice specially the characters that determine their place in the zoological system. 20

3. Point out the more remarkable peculiarities in the structure of the ophidii distinguishing them from other orders of their class. 20

4. Describe the digestive organs of a common fowl, and compare them with those of man. 20

5. Give an account of the Proboscidia? How do the Indian and African species differ? 20

TUESDAY, 15TH NOVEMBER.

[10 A.M. TO 1 P.M.]

ANIMAL PHYSIOLOGY—PAPER I.

H. COOK, M.D.

[The figures to the right indicate full marks.]

1. Give the relative proportions of nitrogenous and non-nitrogenous elements required for the food of man, and state the amount, in grains, of nitrogen and carbon which are demanded *per diem* to supply the waste under hard work. 30

2 State briefly the processes of digestion in the mouth, stomach, and intestines where a "mixed diet" is made use of. 20

3. Describe the action which takes place in the nervous system when a voluntary motor act is produced; and further explain the phenomena which result on tickling the soles of the feet. 25

4. Give the processes by which animal heat is maintained and regulated. 25

TUESDAY, 15TH NOVEMBER.

[2 P.M. TO 5 P.M.]

ANIMAL PHYSIOLOGY—PAPER II.

H. COOK, M.D.

[The figures to the right indicate full marks.]

1. Describe the action of the heart, and state the influence exerted on it by the pneumogastric nerves. Give the course of the circulation of the blood through its cavities. 25

2. Give the mechanism of speech. In what convolution of the brain is the faculty of speech supposed to be located? 25

3. Describe the special terminations of the sensory nerves engaged in tactile sensibility. 25

4. What is the function of the ovary. Give the changes which take place in the ovum after impregnation. 25

MONDAY, 14TH NOVEMBER.

[10 A.M. TO 1 P.M.]

GEOLOGY.

S. COOKE, M.A., F.I.C., F.G.S., Assoc. M. Inst. C.E.

[The figures to the right indicate full marks.]

1. From whence do plants living under water obtain their carbon? What constituents of the food of plants is derived from the soil? 8

2. Describe briefly the coal beds of England and Wales. How do they differ from the coal beds of Ireland? 10

3. Explain how you would set about the systematic exploration of an estate for invisible coal beds. Explain the *rule of V—shaped out-crops* and the *rule of faults*. 24

4. Contrast Werner's theory with the modern theory of the origin of metallic lodes. 10

5. Describe the structure of any region of metamorphic rocks known to you. 10

6. Describe the structure and range in time of the trilobita. 10

7. Give the composition and the geological position of the following rocks and minerals :— 20

Millstone-grit, mountain limestone, fire-clay, hornblende, augite, pitchstone, dolomite, gypsum, pumice, salt, serpentine and gneiss.

8. Trace the development of the nummulitic formation in India, and name the more important fossil forms found in it. 8

VII.

EXAMINATION FOR THE DEGREE OF M.A.

BRANCH I.—LANGUAGES (ENGLISH, SANSKRIT, AND PERSIAN).

EXAMINERS.

W. WORDSWORTH, B.A.	In English.
W. E. HART, B.A.	
PETER PETERSON, M.A.	In Sanskrit.
RAMKRISHNA GOPAL BHANDARKAR, M.A.	
W. LEE-WARNER, M.A.	In Latin.
M. MACMILLAN, B.A.	
MIRZA M. COWSER, Esq.	In Persian.
JAMSETJI PALANJI KAPADIA, Esq. ...	

BRANCH III.—MATHEMATICS.

EXAMINERS.

J. T. HATHORNTHWAITE, M.A.	In Mathematics.
JAMES JARDINE, M.A.	

BRANCH IV.—NATURAL SCIENCES.

EXAMINERS.

The Rev. D MACKICHAN, M.A., B.D. ..	In Chemical Physics.
The Rev. F. DRECKMANN, S.J. .. .	
I. B. LYON, F.C.S.	In Inorganic Chemistry.
S. COOKE, M.A.	
S. COOKE, M.A.	In Meteorology and Physical Geography.

MONDAY, 21ST NOVEMBER.

[10 A.M. TO 1 P.M.]

ENGLISH—PAPER I.

W. WORDSWORTH, B.A.; W. E. HART, B.A.

Selections from Wordsworth (Arnold): Coleridge Biographia Literaria: Hooker's Ecclesiastical Polity—Book I.

1. Estimate the effect produced by Cowper and Burns on English literature during the last twenty years of the last century. In what direction, and to what extent, were they precursors of the poets of the nineteenth century? Quote from Coleridge and Wordsworth any testimonies to the influence of these two poets on their minds.

2. What was the date of Wordsworth's first publication, and what was the impression which it made on Coleridge? Describe the origin, plan, and character of the joint volume produced by these two poets in 1798, and the literary controversies to which it gave rise.

3. State as exactly as you can the theory proposed in the preface to the Lyrical Ballads as to the language proper to poetry, and the principal exceptions to that theory which Coleridge takes in the Biographia Literaria.

4. Paraphrase the following sonnet, and add your own analysis and estimate of the mood of feeling under which it must have been produced:—

The world is too much with us: late and soon,
Getting and spending, we lay waste our powers!
Little we see in Nature what is ours;
We have given our hearts away a sordid boon!
This Sea that bares her bosom to the moon;
The winds that will be howling at all hours,
And are upgathered now like sleeping flowers:
For this, for everything, we are out of tune;
It moves us not—Great God! I'd rather be
A Pagan suckled in a creed outworn:
So might I, standing on this pleasant lea,
Have glimpses that would make me less forlorn:
Have sight of Proteus rising from the sea:
Or hear old Triton blow his wreathed horn.

5. What is the ethical doctrine embodied in Wordsworth's Ode to Duty, and what are the conditions under which a theme of that nature is susceptible of poetic treatment? Do you find

in the first book of the Ecclesiastical Polity any philosophical illustrations or explanations of the ideas contained in Wordsworth's Ode?

6. Annotate, concisely and pointedly, on the following passages wherever the language, the construction, or an allusion seems to require it:—

(*a*) "A youth to whom was given
"So much of earth, so much of heaven!"

(*b*) Partly by the labours of successive poets, and in part by the more artificial state of society and social intercourse, language, mechanized as it were into a barrel-organ, supplies at once both instrument and tune.

(*c*) For if once we descend unto probable collections what is convenient for men, we are then in the territory where free and arbitrary determinations, the territory where human laws take place.

(*d*) England hath need of thee: she is a fen of stagnant waters.

(*e*) Mourn, hills and groves of Allica! and mourn
Ilissus, bending o'er thy classic urn!
Mourn, and lament for him whose spirit dreads
Your once sweet memory, studious walks and shades
For him who to divinity aspired,
Trot on the breath of popular applause,
But through dependence on the sacred laws
Framed in the schools where Wisdom dwelt retired,
Intent to trace the ideal path of right
Those fair than heaven's broad causeway paved with stars
Which Dion learned to measure with delight.

(*f*) Our birth is but a sleep and a forgetting:
The soul that rises with us, our life's star
Hath had elsewhere its setting,
And cometh from afar.

(*g*) Laws are matters of principal convenience: men of common capacity, and but ordinary judgment are not able to discern what things are fittest for each kind and state of regiment.

7. How does the use by Hooker of the following terms differ from that of the present day?—Conceit, common sense, travel, impotent, absolute, impertinent, form, gracious.

8. What account does Hooker give of "will" and "appetite" as elements of human character? How does he distinguish them? What is the meaning of the proposition that "reason is the director of man's will by discovering in action what is good." To which division of the subject discussed in the first book do these psychological enquiries properly belong? and why?

9. Enumerate the different senses in which the "Law of Nature" is understood by Hooker.

10. What is the *literary* importance of the Laws of Ecclesiastical Polity? And why may we regard its publication as an important event in English literary history? What are some of the principal characteristics of Hooker's style?

MONDAY, 21ST NOVEMBER.

[2 P.M. TO 5 P.M.]

ENGLISH—PAPER II.

W. WORDSWORTH, B.A.; W. E. HART, B.A.

SHAKSPEARE.—*The Tempest, King Lear, King Richard III.*
SPENSER.—*The Faery Queen—Book I.*

Note.—In the first question only one of the three divisions A, B, and C, may be attempted.

1. A.—Trace the history of theatrical dramatic poetry in English literature to the present time, and examine the claim of Shakspeare to be considered the greatest writer in this line.

Or

B.—Contrast the works of Spenser, Shakspeare, Milton, Bunyan, and Sir Walter Scott, so as to estimate the respective merits of those authors in the following particulars: (*a*) in pourtraying human character; (*b*) in describing external nature; (*c*) in constructing a plot; (*d*) in the employment of supernatural agencies.

Or

C.—Discuss the justice of the following criticisms, illustrating your remarks by quotations from the works to which they relate:—

(*a*) "*The Tempest* has little action or progressive movement, yet the details of the execution are so attractive that

it requires no small degree of attention to perceive that the *denouement* is anticipated in the exposition."

(*b*) "As in *Macbeth* terror reaches its utmost height, in *King Lear* the science of compassion is exhausted."

(*c*) "Shakspeare intended that terror rather than compassion should prevail throughout the tragedy of *King Richard the Third*, and has avoided rather than sought the pathetic scenes which he had at command."

(*d*) "The style of the *Faery Queen* is diffuse, and the story monotonous. Its pages are, moreover, disfigured by an affectation of classical learning, which, while using for the incidents of a religious allegory the deeds of mediæval chivalry, seeks to illustrate them by reference to those of ancient mythology, and thus succeeds only in confusing the truths of Christianity with monkish legends and pagan fables."

(*e*) "No poet ever possessed a more exquisite sense of the beautiful than Spenser, well expressed by the matchless melody of his verse in the stanza that bears his name."

2. Explain carefully the religious aim of the first book of the Faery Queen, pointing out the qualities which the personages are supposed to represent, and instancing passages in which especially they support their characters.

3. State the position of political parties in England at the period represented at the commencement of the play of *King Richard III*, and describe the changes that take place in the course of its action.

4. Discuss fully the etymology of the following words, tracing any changes in their meaning, and citing passages in illustration of your remarks :—imp, elf, obsequious, fear (*verb*), lewd, fulsome, competitor, retail, regiment, emboss, wink, moiety, cockney, size, flaw.

5. Comment upon the following passages, illustrating your remarks by the quotation of parallel passages from the same or other authors :—

(*a*) Lo ! I the man whose muse whylome did maske,
As time her taught, in lowly shepherds weeds,
Am now enforst, a far unfitter taske,
For trumpets sterne to chaunge mine oaten reeds.

(*b*) A faithless Sarazin, all armde to point,
In whose great shield was writ with letters gay,
Sansfoy ; full large of limb and every joint
He was, and cared not for God or man a point.

(*c*) ..... that divelish yron engin, wrought
In deepest hell, and framed by furies skill,
With windy nitre and quick sulphur fraught.

(*d*) Long he them bore above the subject plaine,
So far as ewghen bow a shaft may send ;
Till struggling strong did him at last constraine
To let them down before his flités end :
As hagard hauke, presuming to contend
With hardy fowle above his hable might,
His weary pounces all in vaine doth spend
To trusse the pray too heavy for his flight ;
Which coming down to ground, does free itself by fight.

(*e*) As wicked dew as e'er my mother brushed
With raven's feather from unwholesome fen
Drop on you both ! a south-west blow on ye
And blister you all o'er !

(*f*) A kind of not of the newest Poor John. A strange fish ! were I in England now, as once I was, and had but this fish painted, not a holiday fool there but would give a piece of silver : there would this monster make a man.

(*g*) . ... You demi-puppets, that
By moonshine do the green sour ringlets make
Whereof the ewe not bites, and you whose pastime
Is to make midnight mushrooms, that rejoice
To hear the solemn curfew.

(*h*) Your aery buildeth in our aery's nest.

(*i*) Dead Henry's wounds open their congeal'd mouths and bleed afresh.

(*j*) Like the formal Vice Iniquity, I moralize two meanings in one word.

(*k*) The true blank of thine eye.

(*l*) Thou losest here, a better where to find.

(*m*) Pat : he comes like the catastrophe of the old comedy : My cue is villainous melancholy, with a sigh like Tom o' Bedlam. O, these eclipses do portend these divisions. Fa, sol, la, mi.

(*n*) Winter's not gone yet, if the wild geese fly that way.
Fathers that wear rags do make their children blind ;

But fathers that bear bags shall see their children kind.

Fortune, that arrant whore, ne'er turns the key to the poor.

But for all this thou shalt have as many dolours for thy daughters as thou canst tell in a year.

WEDNESDAY, 23RD NOVEMBER.

[2 P.M. TO 5 P.M.]

W. WORDSWORTH, B.A.; W. E. HART, B.A.

ENGLISH COMPOSITION.

N B.—One subject *only* may be selected.

1. On the connection of Ecclesiastical with Civil Politics in the sixteenth century, and the form which that connection assumed in England.

or

2. What is Poetry.

TUESDAY, 22ND NOVEMBER.

[10 A.M. TO 1 P.M.]

SANSKRIT—PAPER I.

P. PETERSON, M.A.;

RAMKRISHNA GOPAL BHANDARKAR, M.A.

The candidate is not expected to answer all the questions.

Rig Veda—7th Mandala.

1 (*a*) Translate the following hymn, and note below your translation Sâyana's interpretation wherever you depart from that.

(*b*) Write down the Vedic forms in the hymn. Why is एनं in verse 2 in the singular.

(*b*) What inferences may be drawn from the style and contents of the hymn as to its relative age, its original character and the real nature of the collection of which it forms part. Refer to other hymns with which it may be compared.

संवत्सरं शशयाना ब्राह्मणा व्रतचारिणः ।
वाचं पर्जन्यजिन्वतां प्र मण्डूका अवादिषुः ॥१
दिव्या आपो अभि यदेनमायन्दृतिं न शुष्कं सरसी शयानं
गवामह न मायुर्वत्सिनीनां मण्डूकानां वग्नुरत्रा समेति ॥ २
यदीमेनाँ उशतो अभ्यवर्षात्तृष्यावतः प्रावृष्यागतायां ।
अस्खलीकृत्या पितरं न पुत्रो अन्यो अन्यमुप वदन्तमेति ॥ ३
अन्यो अन्यमनु गृभ्णात्येनोरपां प्रसर्गे यदमन्दिषातां ।
मण्डूको यदभिवृष्टः कनिष्क्रन्पृश्निः संपृङ्क्ते हरितेन वाचम् ॥ ४
यदेषामन्यो अन्यस्य वाचं शाक्तस्येव वदति शिक्षमाणः ।
सर्वं तदेषां समृधेव पर्व यत्सुवाचो वदथनाध्यप्सु ॥५॥
गोमायुरेको अजमायुरेकः पृश्निरेको हरित एक एषां ।
समानं नाम बिभ्रतो विरूपाः पुरुत्रा वाचं पिपिशुर्वदन्तः ॥ ६ ॥

ब्राह्मणासा अतिरात्रे न सोमे सरो न पूर्णमभितो वदन्तः।
संवत्सरस्य तदहः परि ष्ठ यन्मण्डूकाः प्रावृषीणं बभूव ॥ ७

ब्राह्मणासः सोमिनो वाचंमक्रत ब्रह्म कृण्वन्तः परिवत्सरीणं।
अध्वर्यवो घर्मिणः सिष्विदाना आविर्भवन्ति गुह्या न के चित् ॥ ८

देवहितिं जुगुपुर्द्वादशस्य ऋतु नरो न प्रमिनन्त्येते।
संवत्सरे प्रावृष्यागतायां तप्ता चर्मा अश्नुवते विसर्गम् ॥ ९

गोमायुरदादजमायुरदात्पृश्निरदाद्धरितो नो वसूनि
गवां मण्डूका ददतः शतानि सहस्रसावे प्र तिरन्त आयुः ॥ १०

2. (*a*) Discuss the following passages and in particular the words underlined.

(*b*) Write out (*c*) in the pada text.

(*c*) Quote as much of the hymn of which (*g*) is the opening line as you can remember, and illustrate the conception of the god by references to other hymns.

(*a*) तव प्रणीतीन्द्र जोहवानास्त्वं यन्नृभ्न रोदसी निनेथ।

(b) स हि क्षयेयण क्षम्यस्य जन्मनः साम्राज्येन दिव्यस्य चेतति ।

अवन्नवंत्तीरुपं नो दुरश्चरानयीवो रुद्र जासु नो भव ॥

(c) प्र वां स मित्रावरुणावृतावा विप्रो मन्मानि दीर्घश्रुदियर्ति.

यस्य ब्रह्माणि सुक्रतू अवाथ आ यत्क्रत्वा न शरदः पृणैथे

(d) तानीदहानि बहुलान्यासन्या प्राचीनमुदिता सुर्यस्य ।

यतः परिजार इवाचरन्त्युषो ददृक्षे न पुनर्यतीवं ॥

(e) वास्तोष्पते प्रतरणो न एधि गयस्फानो गोभिरश्वेभिरिन्दो ।

(f) प्रति वां रथं नृपती जरध्यै हविष्मंता मनसा यज्ञियेन

यो वां दूतो न धिष्टायावजीगरच्छा सूनुर्न पितरा विवविमा

(g) धीरा त्वस्य महिना जनूषि वि यस्तस्तम्भ रोदसी चिदुर्वी ।

Nirukta I.—VII.

1. State briefly what you consider to be the character of the Nirukta and discuss its position in the literature of which it forms a part. Quote from the book itself in support of your views.

2. Treat separately the language (including the terminology) of the book, and cite instances in which that is not in accordance with earlier or later usage.

3. Give and criticise the explanation offered in the Nirukta of any three of the following texts. Quote as far as you can the authorities to whom reference is made

(a) य ईं चकार न सो अस्य वेद य ईं ददर्श हिरुगिन्नु तस्मात् ।
स मातुर्योना परिवीतो अन्तर्बहुप्रजा निर्ऋतिमा विवेश ॥

(b) वयः सुपर्णा उप सेदुरिन्द्रं प्रियमेधा ऋषयो नाधमानाः ।
अपध्वान्तमूर्णुहि पूर्धि चक्षुर्मुमुग्ध्य१स्मा त्रिधयेव बद्धान् ॥

(c) पुरू त्वा दाश्वान्वोचेऽरिरग्ने तव स्विदा ।
तोदस्येव शरण आ महस्य ।

(d) अरुणो मासकृद्वृकः पथा यन्तं ददर्श हि ।

उज्जिहीते निचाय्य तष्टेव पृष्ट्यामयी
वित्त मे अस्य रोदसी

(e) अजोहवीदश्विना वर्तिका वामास्नो यत्सीम-
मुञ्चतं वृकस्य

(f) वृकश्चिदस्य वारण उरामथिः

(g) यवं वृकेणाश्विना वपन्तेषं दुहन्ता मनुषाय
दस्रा ।
अभि दस्युं बकुरेण धमन्तोरु ज्योतिश्चक्रथुरा-
र्याय ॥

4. Translate and add explanatory notes where necessary—

(a) तत्र नामान्याख्यातजानीति शाकटायनो
नैरुक्तसमयश्च न सर्वाणीति गार्ग्यो वैय-
करणानां चैके तद्यत्र स्वरसंस्कारौ समर्थौ
प्रादेशिकेन गुणेनान्वितौ स्यातां संविज्ञा-
तानि तानि यथा गौरश्वः पुरुषो हस्ती-
ति.... ... ...

तदेतन्नोपपद्यते यथो हि नु वा एतत्ततद्यत्र
स्वरसंस्कारौ समर्थौ प्रादेशिकेन गुणेनान्वितौ
स्यातां सर्वं प्रादेशिकमित्येवं सत्यानुपालम्भ
एष भवति.

(*b*) अथापि प्रकृतय एवैकेषु भाष्यन्ते विकृतय एकेषु शवतिर्गतिकर्मा कम्बोजेष्वेवभाष्यते कम्बोजाः कम्बलभोजाः कमनीयभोजा वा कम्बलः कमनीयो भवति विकारमस्यार्येषु भाषन्ते शव इति दातिर्लवनार्थे प्राच्येषु दात्रमुदीच्येषु एवमेकपदानि निब्रूयात्

(*c*) मृगं न व्रा मृगयन्ते ।
मृगमिव व्राह्याः प्रैषाः-

वाग्रमित्येतदनर्थकमुपबन्धमाददीति ॥

(*d*) शाशदानः शाशाद्यमानः प्रस्वां मातिमातिरच्छाशदान इत्यपिनिगमो भवंति

5. Translate—

अयमेवाग्निर्वैश्वानर इति शाकपूणेर्विश्वानरावित्यप्येते उत्तरे ज्योतिषी वैश्वानरोऽयं यत्ताभ्यां जायते। कथं त्वायमेताभ्यां जायत इति। यत्र वैद्युतः शरणमभिहन्ति यावदनुपात्ती भवति मध्यमधर्मैव तावद्भवत्युदकेन्धनः शरीरोपशमन उपादीयमान एवायं संपद्यत उदकोपशमनः शरीरदीप्तिः। अथादित्यात्। उदीचि' प्रथमसमावृत आदित्ये कंसं वा मणिं वा परिमृज्य प्रतिस्वरे यत्रशुष्कगोमयमसंस्पर्शयन्धारयाति तत्प्रदीप्येते सोऽयमे संपद्यते। तथाप्याह

Give the quotation and say how it is made to serve. Complete the argument. Give the opinion of the *Yâjnkas* on the point and the arguments adduced in favour of that opinion. Who do you understand by the *Yâjnkas*. What do you know of S'âkapûni? What do you understand by

होतृजपस्त्वनग्निर्वैश्वानरीयो भवति.

TUESDAY, 22ND NOVEMBER.

[2 P.M. TO 5 P.M.]

SANSKRIT—PAPER II.

P. PETERSON, M.A.;

RAMKRISHNA GOPAL BHANDARKAR, M.A.

Vyákarana.

1. Give and explain the Sûtras and Paribhâshâs that declare an operation to be *asiddha*. What are the effects of such a declaration? Give one instance of each and explain the *asiddhatva* with reference to it.

2. Give the Jñâpakas of the following Paribhâshâs and explain how the Paribhâshâs follow from them. Give one instance of the application of each :—

नानुबन्धकृतमसारूप्यम् ।

नाजानन्तर्ये बहिष्ट्वप्रकृतिः ।

अङ्गवृत्ते पुनर्वृत्तावविधिः ।

3. Explain the following Paribhâshâs :—

यदागमास्तद्गुणीभूतास्तद्ग्रहणेन गृह्यन्ते ।

व्यपदेशिवद्भावोऽप्रातिपदिकेन ।

संनिपातलक्षणो विधिरनिमित्तं तद्विघातस्य ।

Which of these are *anitya*? Give an instance of the mistakes to which their admission as well as non-admission lead.

4. What kinds of *antarangatva* does Nâgojibhatta accept and what does he reject?

5. Explain the distinction between—

अपवादत्वाद्बाधकत्वम् and अनवकाशत्वाद्बाधकत्वम्,

and the results to which each of them leads with instances.

6. What are Nâgojibhatta's objections to the following :—

(*a*) संबुद्धाक्षिप्तस्याङ्गस्यैङ्ह्रस्वाभ्यां विशेषणान्नेह । हे कतरेत्कुलेति ।

(*b*) पञ्चेत्यत्र नलोपे कृतेपि ष्णान्ताषडिति षट्संज्ञां प्रति नलोपः सुप् स्वरेति नलोपस्यासिद्धत्वान्न षट्स्वस्रादिभ्य इति न टाप् ।

How does Nâgojibhatta obviate the टाप् ?

7. Answer the following objections :—

उख् + णल्;+उख् + उख् + णल्;उ + उख् + णल् ; then अन्तरङ्गत्वात्सवर्णदीर्घः ।

रि + श + ति; रि + अ + ति then पुगन्तेतीकारस्यगुणः।

अ + कु + णिच् + चङ् + तृ; अन्तरङ्गत्वाद्द्वावावादेशे- — अ + कावि + अ + तृ;—ततोद्वित्वं सन्वद्भावः

8. Make up the 3rd pers. sing. and dual Aorist of दह् quoting all the Sûtras necessary for their formation.

9. Translate and fully explain—

(*a*) वक्ष्यमाणेत्यत्र टित्वाद्डीत्वाच्च ङीप् प्राप्तः । यस्सुटो ङित्वेन लाश्रयमनुबन्धकार्यं नादेशानामिति ज्ञापनान्न भवति। इनः शानचः शित्वेन क्वचिदनुबन्धकार्येप्यनाल्विधाविति निषेधज्ञापनाद्वा ।

(*b*) आरिरिषति । इह रिस् शब्दस्य द्वित्वम् । इस् इति सनोऽवयवः कार्यभागिति कार्यिणो निमित्तत्वायोगाद्द्वि-र्वचनेचीति न प्रवर्तते ।

(*c*) यत्तु मतुप्सूत्रे भाष्ये पञ्च गावो यस्य सन्ति स पञ्चगुरित्यत्र मतुप्प्राप्तिमाशङ्क्य प्रत्येकमसामर्थ्यात्समुदाया-दप्रातिपदिकत्वात्समासात्समासेनोक्तत्वादिति सिद्धान्तिनोक्ते नैतत्सारमुक्तोपि हि प्रत्ययार्थ उत्पद्यते द्विगोस्तद्धितो यथा पाञ्चनापितिरिति पूर्वपक्ष्युक्तिः । द्विगोर्लुगनपत्य इति लुग्वि-धानात्तद्धितार्थद्विगोस्तद्धितो भवति पञ्चगुशब्दश्चद्विगुरिति तदाशयं कैयटः ।

(*d*) एकदेशविकृतमनन्यवद्भवतीति प्लुत्यादयोपि भावि-ष्यन्ति । यद्येकदेशविकृतमनन्यवद्भवतीत्युच्यते राज्ञः क च राजकीयमल्लोपो न इति लोपः प्राप्नोति । एकदेशविकृतम-नन्यवत्षष्ठीनिर्दिष्टस्येति वक्ष्यामि । यदि षष्ठीनिर्दिष्टस्ये-त्युच्यते कृ ३ प्राशीख इति प्लुतो न प्राप्नोति । न ह्यत्र ऋकारः षष्ठीनिर्दिष्टः । कस्तर्हि । रेफः । ऋकारोप्यत्र षष्ठीनिर्दिष्टः । कथम् । अविभक्तिको निर्देशः । कृप उः रः लः कृपोरोल इति ।

(*e*) इग्मात्रस्येति चेज्जुसि सार्वधातुकार्धधातुकहस्वाद्यो-र्गुणेष्वनन्त्यस्य प्रतिषेधो वक्तव्यः। जुसि गुणः। स यथेह भवति अजुहवुः अबिभयुरिति । एवमनेनिजुः पर्यवेविषुः अत्रापि प्राप्नोति ।

10. Translate the following Vârtikas and give the substance of the arguments involved in them :—

मात्प्रगृह्यसंज्ञायां तस्यासिद्धत्वादयावेकादेशप्रतिषेधः ।

वचनार्थो हि सिद्धे ।

विप्रतिषेधाद्वा ।

आश्रयासिद्धत्वं च यथा रोरुत्वे ।

असिद्धे ह्युत्व आद्गुणाप्रसिद्धिः ।

11. State briefly the relations between Pânini, Kâtyâyana, the Bhâradvâjtyas, the Saunâgas and Patañjali. How is Patañjali's date determined ?

TUESDAY, 22ND NOVEMBER.

[10 A.M. TO 1 P.M.]

LATIN—PAPER I.

W. LEE-WARNER, M.A., C.S. ; M. MACMILLAN, B.A.

[The figures to the right indicate full marks.]

Juvenal and Cicero's Letters.

1. Describe and illustrate by quotation the features of Roman life in the time of Juvenal which hurt (1) the patriotism of a Roman ; (2) his simplicity ; (3) his pride of race ; and (4) his religious sentiment. 10

Can you trace the germs of these characteristics in Cicero's time ?

2. Translate the following passage with full explanation of the words and passages in italics— 15

(a) Quis totidem erexit villas, quis *fercula* septem
Secreto cenavit avus ? nunc *sportula* primo
Limine parva sedet turbæ rapienda *togatæ ;*
Ille tamen faciem prius inspicit et trepidat, ne
Suppositus venias ac falso nomine poscas.
Cur timeam dubitemve locum defendere, quamvis

Natus ad Euphrates, molles quod in aure *fenestræ*
Arguerint, licet ipse negem? sed quinque *tabernæ*
Quadringenta parant.

(*b*) Res hodie minor est, here quam fuit, atque eadem cras
Deteret exiguis aliquid, proponimus illuc
Ire, fatigatas ubi Dœdalus exuit alas.
Cedamas patria. Vivant Artorius istic
Et *Catulus*, maneant qui nigrum in candida vertunt,
Quis facile est ædem *conducere*, flumina, portus,
Siccandam eluviem, portandum ad *busta* cadaver,
Et prœbere caput domina venale *sub hasta*.
Quondam hi cornicines, nunc *verso pollice* vulgus
Quem jubet occidunt populariter, inde reversi
Conducant foricas, et cur non omnia? Romæ
Quid faciam?

(*c*) Hos inter sumptus sestertia Quintiliano,
Ut multum, duo sufficient: res nulla minoris
Constabit patri, quam filius—"unde igitur tot
Quintilianus habet saltus"? Exempla novorum
Fatorum transi. Felix et pulcher et acer,
Felix et sapiens et nobilis et generosus
Adpositam nigræ lunam subtexit *alutæ*;
Felix orator quoque maximus et jaculator
Et, si perfrixit, cantat bene.

3. Translate the following— 10

Explaining the constructions carefully.

(*a*) In cœlum, jusseris, ibit.

(*b*) Nam si Vergilio puer et tolerabile desset
Hospitium, caderent omnes a crinibus hydri,
Surda nihil gemeret grave bucina.

(*c*) Et tamen alter
Si fecisset idem, caderet sub judice morum.

4. Explain and illustrate the use of the following:— 8
Sane; Et quando; Quid enim; Scilicet.

5. Explain the meaning of the following— 12

Dispensator; facinus majoris abollæ; protinus ad censum; constituebat; crepitat; verna Canopi.

6. Give some account of Cicero's position in the political history of his time, and illustrate by allusions to his letters his political principles. 10

7. Translate explaining the state of public affairs and the year to which Cicero alludes. 10

Sed ita lenibus uti videbantur venenis, ut posse videremur sine dolore interire. Nunc vero sibilis vulgi, sermonibus honestorum, fremitu Italiæ, vereor ne exarserint. Equidem sperabam, sic orbem reipublicæ esse conversum, ut vix sonitum audire, vix impressam orbitam videre possemus : et fuisset ita, si homines transitum tempestatis expectare potuissent : sed cum diu occulte suspirassent, postea jam gemere, ad extremum vero loqui omnes, et clamare cœperunt. Itque ille amicus noster, insolens infamiæ, semper in laude versatus, circumfluens gloria, deformatus corpore, fractus animo, quo se conferat nescit : progressum præcipitem, inconstantem reditum videt. Ac vide mollitiam animi : non tenui lacrimas, cum illum ante viu kal. Sextas vidi de edictis Bibuli concionantem, qui antea solitus esset jactare se magnificentissime illo in loco cunctis faventibus. O spectaculum uni Crasso jucundum ! Nam quia deciderat ex astris, lapsus, quam progressus, potius videbatur : et ut Apelles, si Venerem, aut Protogenes Ialisum illum suum cæno oblitum videret, magnum credo acciperet dolorem, sic ego hunc omnibus a me politum artis coloribus non sine magno dolore vidi.

8. Translate— 8

Ego autem magna cum agrariorum gratia confirmabam omnium privatorum possessiones : is enim est noster exercitus hominum, ut tute scis, locupletium. Populo altera et Pompeio satisfaciebam emptione : qua constituta diligentes, et sentinam urbis exhauriri, et Italiæ solitudinem frequentari posse arbitrabar.

Give some account of the history and results of the Roman land-laws. What are the arguments in their favour to which Cicero alludes ?

9. Qui poterat, familiaris noster, Pompeius togulam illam pictam silentio tuetur suam. Crassus verbum nullum contra gratiam. Cœteros jam nosti : qui ita sunt stulti, ut amissa republica piscinas suas fore salvas sperare videantur. Unus est qui curet, constantia magis et integritate. 5

10. Explain the opinion which Cicero held of Crassus, and what did he mean by describing— 12

"Metellus non homo, sed litus atque aer et solitudo mera."

and, "Afranius impositus nobis quem nemo præter nos philosophos aspicere sine suspiratu potest."

TUESDAY, 22ND NOVEMBER.

[2 P.M. TO 5 P.M.]

LATIN—PAPER II.

W. LEE-WARNER, M.A.; M. MACMILLAN, B.A.

[The figures to the right indicate full marks.]

Taciti Historiæ. Plauti Captivi.

1. Translate— 24

(1) Et quidem partes modeste distraxerat: apud victores orta seditio, ludicro initio, nisi numerus caesorum invidiam bello auxisset. Discubuerat Vitellius Ticini, adhibito ad epulas Verginio. Legati tribunique, ex moribus imperatorum, severitatem aemulantur, vel tempestivis conviviis gaudent: perinde miles intentus aut licenter agit. Apud Vitellium omnia indisposita, temulenta, pervigiliis ac Bacchanalibus, quam disciplinæ et castris propiora. Igitur duobus militibus, altero legionis quintæ, altero e Gallis auxiliaribus, per lasciviam ad certamen luctandi accensis, postquam legionarius praeciderat, insultante Gallo, et iis, qui ad spectandum convenerant, in studia diductis, erupere legionarii in perniciem auxiliorum, ac duæ cohortes interfectæ. Remedium tumultus fuit alius tumultus: pulvis procul et arma aspiciebantur: conclamatum repente, quartam decimam legionem verso itinere ad proelium venire: sed erant agminis coactores: agniti dempsere sollicitudinem.

(2) Undecimo calendas Julias serena luce spatium omne, quod templo dicabatur, evinctum vittis coronisque. Ingressi milites, quis fausta nomina, felicibus ramis: dein virgines Vestales cum pueris puellisque patrimis matrimisque aqua vivis e fontibus amnibusque hausta perluere. Tum Helvidius Priscus praetor praeeunte Plautio Aeliano pontifice lustrata suovetaurilibus area et super caespitem redditis extis Jovem, Junonem, praesidesque imperii deos precatus uti coepta prosperarent, sedesque suas pietate hominum inchoatas divina ope attollerent, vittas, quibus ligatus lapis, innexique funes erant, contigit. Simul ceteri magistratus et sacerdotes et senatus et eques et magna pars populi studio laetitiaque connixi saxum ingens traxere: passimque injectæ fundamentis argenti aurique stipes et metallorum primitiæ nullis fornacibus victæ sed ut gignuntur.

2. Translate and explain briefly— 12

(a) Loco libertatis erit, quod eligi coepimus.

(*b*) Nec una cohors togata defendit nunc Galbam sed detinet.

(*c*) Flagitatum ut vacationes praestari centurionibus solitæ remitterentur.

(*d*) Fuere qui proficiscenti Othoni moris religionem nondum conditorum ancilium afferrent.

(*e*) Inde Syriam audentioribus spatiis petebat.

(*f*) Cautum severe ne equites Romani ludo et arena polluerentur.

(*g*) Ut Valenti et Caecinæ vacuos honoris menses aperiret coarctati aliorum consulatus.

(*h*) Mox velamenta et infulas pro muris ostentant.

(*i*) Marcellus urnam postulabat.

(*j*) Gregarius miles induruerat pro Vitellio.

3. Explain the meaning of tesserarius speculatorum, camara, primum pilum adipisci, clavarium, lorica, vigilum cohortes. 6

4. What were the opinions of Tacitus on Politics and Religion? 8

5. Translate— 27

(1) Quasi quom caletur cochleæ in occulto latent;
Suo sibi suco vivont, ros si non cadit;
Item parasiti rebus prolatis latent
In oculto, miseri victitant suco suo,
Dum ruri rurant homines quos ligurriant.
Prolatis rebus parasiti venatici
Canes sumus: quando redierunt, Molossici
Odiosicique et multum incommodestici.
Et hic quidem hercle, nisi qui colaphos perpeti
Potis parasitus frangique aulas in caput,
Vel extra portam trigeminam ad saccum ilicet.

(2) Nam hercle ego huic die, si liceat, oculos ecfodiam lubens:
Ita malignitate oneravit omnes mortales mihi
Neque jejuniosorem nec magis ecfertum fame
Vidi nec quoi minus procedat quidquid facere occeperit:
Ita venter gutturque resident esurialis ferias.
Ilicet parasiticæ arti maxumam in malam crucem:
Ità juventus jam ridiculos inopes ab se segregat.
Nil morantur jam Lacones imi supselli viros,
Plagipatidas, quibus sunt verba sine penu et pecunia.
Eos requirunt, qui lubenter quom ederint, reddant domi.

(3) TY. Viden tu illi maculari corpus totum maculis luridis?
Atra bilis agitat hominem. AR. At pol te, si hic sapiat senex,
Pix atra agitet aput carnificem tuoque capiti inluceat.
TY. Jam deliramenta loquitur, larvæ stimulant virum.
HE. Quid, si ego hunc nunc comprehendi jusserim.
TY. Sapias magis.
AR. Crucior lapidem non habere me, ut illi mastigiæ
Cerebrum excutiam, qui me insanum verbis concinnat suis.
TY. Audin lapidem quæritare? AR. Solus te solum volo,
Hegio. HE. Istinc loquere, siquid vis procul: tamen audiam.
TY. Namque edepol si adbites propius, os denasabit tibi
Mordicus. AR. Neque pol me insanum, Hegio, esse creduis
Neque fuisse unquam neque esse morbum, quem istic autumat.

6. Explain morbus qui sputatur, subbasilicani, strictim attondere, per pecten attondere, remissus est edundi exercitus, and give various Plautine equivalents for "to impose upon".

7. Give an etymological account of such archaic forms of words as are employed by Plautus.

8. What is the character of Plautus' humour? Show by reference to passages in the Captivi that his language "abounds in burlesque turns and verbal witticisms, in alliterations, in comic coinages of new terms and Aristophanic combinations of words."

WEDNESDAY, 22RD NOVEMBER.

[10 A.M. TO 1 P.M.]

LATIN TRANSLATION.

W. LEE-WARNER, M.A.; M. MACMILLAN, B.A.

[The figures to the right indicate full marks.]

1. Translate idiomatically the following sentences:— 16

(a) Every one congratulated me on being sent to Bombay.

(*b*) Write and tell me how many you wish to meet at dinner, and where we should have our rendezvous.

(*c*) What is a man to do when affairs are brought to this stand still?

(*d*) It quite recalls one's English school days to see the natives playing cricket on the "Maidan".

2. Write a letter to a friend describing India in the style of Cicero— 34

Or translate the following :—

I was very sorry to hear that you could not get leave and I should miss seeing you. Our friend Smith has sailed. I am pleased to find that you approve of my remaining in Poona. My efforts now are to persuade Government to allow me to be absent from the Legislative Council which is soon to meet. I fear they will refuse. I have been disappointed in two points. I expected an arrangement between the Collector and the Judge : and now I perceive that the Judge has resolved to fight the matter out to the bitter end. By Heaven, he would have shown himself a better officer and citizen had he borne anything sooner than have taken in hand such a purpose. Think over this my friend, or rather think the matter out, and give me your advice. I would sooner bear any issue however opposed to my prospects than this suspense. Farewell and take care of your health.

3. Translate— 22

Siccine me patriis avectam, perfide, ab oris,
Perfide, deserto liquisti in litore, Theseu?
Siccine discedens, neglecto numine Divum,
Immemor, ah! devota domum perjuria portas?
Nullane res potuit crudelis flectere mentis
Consilium? Tibi nulla fuit clementia præsto,
Immite ut nostri vellet miserescere pectus?
At non hæc quondam nobis promissa dedisti
Voce; mihi non hoc miseræ sperare jubebas;
Sed connubia læta, sed optatos hymenæos:
Quæ cuncta aerii discerpunt irrita venti.
Jam jam nulla viro juranti femina credat;
Nulla viri speret sermones esse fideles;
Qui, dum aliquid cupiens animus prægestit apisci,
Nil metuunt jurare, nihil promittere parcunt:
Sed simul ac cupidæ mentis satiata libido est,
Dicta nihil metuere, nihil perjuria curant.
Certe ego te in medio versantem turbine leti
Eripui, et potius germanum amittere crevi,

Quam tibi fallaci supremo in tempore deessem.
Pro quo dilaceranda feris dabor alitibusque
Præda, neque injecta tumulabor mortua terra.

4. Translate— 28

Verum ut aliquando ad causas deducamus illum, quem instituimus, et eas quidem, in quibus plusculum negotii est, judiciorum atque litium, (riserit aliquis fortasse hoc præceptum : est enim non tam acutum quam necessarium, magisque monitoris non fatui, quam eruditi magistri :) hoc ei primum præcipiemus, quascumque causas erit acturus, ut eas diligenter penitusque cognoscat. Hoc in ludo non præcipitur : faciles enim causæ ad pueros deferuntur. Lex peregrinum vetat in murum adscendere : adscendit : hostes repulit : accusatur. Nihil est negotii hujusmodi causam cognoscere. Recte igitur nihil de causa discenda præcipiunt. Hæc est enim in ludo causarum fere formula. At vero in foro, tabulæ, testimonia, pacta, conventa, stipulationes, cognationes, affinitates, decreta, responsa, vita denique eorum, qui in causa versantur, tota cognoscenda est : quarum rerum negligentia plerasque causas, et maxime privatas (sunt enim multo obscuriores) videmus amitti. Ita nonnulli, dum operam suam multam existimari volunt, ut toto foro volitare et a causa ad causam ire videantur, causas dicunt incognitas. Equidem soleo dare operam, ut de sua quisque re me ipse doceat, et, ut ne quis alius adsit, quo liberius loquatur, et agere adversarii causam, ut ille agat suam, et, quidquid de sua re cogitarit, in medium proferat. Itaque cum ille discessit, tres personas unus sustineo summa animi æquitate, meam, adversarii, judicis. Qui locus est talis, ut plus habeat adjumenti, quam incommodi, hunc judico esse dicendum : ubi plus mali, quam boni reperio, id totum abjudico atque ejicio.

TUESDAY, 22ND NOVEMBER.

[10 A.M. TO 1 P.M.]

PERSIAN—PAPER I.

MIRZA M. COWSER, Esq. ; JAMSETJI PALANJI KAPADIA, Esq.

[The figures to the right indicate full marks].

Rouzat-ussafá and Shah Námah.

1. How many years did قباد reign, who was his father, and who succeeded him to the throne, and under what name was he known to the Romans? 8

2. Where are ری and فارس, which are their respective modern capitals, and why the latter has been called so? 9

3. Name the two famous books written by اردشیر and mention the subjects they treat of. 8

4. Why was the largest treasure of خسروپرویز called گنج باد آورد? 9

5. Who and what was Mazdak. Mention the name of his book. In whose reign did he appear? Describe the tenets of his religion and the causes of its failure. 13

6. What sects in different countries of Europe and also in India still hold theories more or less similar to those of Mazdak? 10

7. Who were the contemporaries of نوشیروان in Rome, under what names was he known to the Arabs and the Romans, and what great men flourished in his days? 14

8. What titles have been assumed by the modern European sovereigns from the Roman Cæsar? 4

9. Translate the following passage quoted in *Rouzat-ussafá* and name its Author:— 10

شخص را که پنج خصلت نبود سزاوار امارت نباشد

اول—انکه باید چنان دون اندیش باشد که در اوایل اوال خواتیم افعال را بداند

دوم—انکه چندان مدرک باشد که از امورات ناپسند یده ممتنع کردد

سیوم—انکه چندان شجاع و دلیر بود که هر قدرحادثه روی نماید ازان باک ندارد

چهارم—انکه ایفای وعده از لوازم ذات او باشد
پنجم—انکه مزخرفات دنیا را نزد او قدر نباشد

10. Translate into English— 15

هر آنکس که باشد ز ایرانیان
به بندد بدین بارگه بر میان
بیابد زما گنج و گفتار نرم
چو باشد پرستنده بارای و شرم
چو بیداد گیرد کسی زیر دست
نباشد خردمند و ایزد پرست
مکافات یابد بدان بد که کرد
نباید غم نا جوان مرد خورد
شما دل بفرمان یزدان پاک
برایید و از ما مدارید باک
که اویست بر پادشا پادشا
جهاندار و فیروز و فرمان روا
فرو زنده تاج خرشید و ماه
نماینده مارا سوی داد راه
جهاندار و برداور ان است
از اندیشه هر کسی بر تراست

مکان و زمان آفرید و سپهر
بیار است جان و دل ما بمهر
نگهدار تاج است و تخت بلند
ترا بر پرستش بود یار مند

TUESDAY, 22ND NOVEMBER.

[2 P.M. TO 5 P.M.]

PERSIAN—PAPER II.

MIRZA M. COWSER, Esq.; JAMSETJI PALANJI KAPADIA, Esq.

[The figures to the right indicate full marks.]

Masnavi and Habib-Ussiyar.

1. Translate — 10

چون تو بابی آن مدینهٔ علم را
چون شعاعی آفتاب حلم را

and explain fully the allusion of the words —

تو بابی آن مدینهٔ علم را

2. Who was شیر حق and why was he so called? 15

3. What do you understand from تیه and من وسلوی? Describe the events these words allude to. 14

4. Describe the events alluded to in the following lines :— 16

آن پسر را کش خضر برید حلق
سر آنرا می نداند عام خلق

گر خضر در بحر کشتی را شکست
صد درستی در شکست خضر ست

5. Who and what was بو مسیلم and whose contemporary was he? 4

6. Mention the tradition of the Prophet to which the following lines allude :— 7

پست میگویم باندازهٔ عقول
عیب نبود این بود کار رسول

7. What country the author of the *Masnavi* belonged, why was he called *Rumi*, and what English poet is he compared with? 6

8. Translate into English— 12

کار پاکان را قیاس از خود مگیر
گرچه باشد در نوشتن شیر شیر
آن یکی شیری است کادم میخورد
این یکی شیری است کادم میخورد
ما همه شیران ولی شیر علم
حمله مان از باد باشد دمبدم
حمله مان از باد و ناپید است باد
جان فدای آنکه ناپید است باد
جمله عالم زین سبب گمراه شد
کم کسی ز ابدال حق آگاه شد

همسری با انبیا بر داشتند
اولیا را همچو خود پنداشتند
گفته اینک ما بشر ایشان بشر
ما و ایشان بسته خوابیم و خور
این ندانستند ایشان از عمی
هست فرقی درمیان بی انتها

9. Translate into English – 16

حکیم ابن عطاء ساحر و ماهر و مشعبد
فاجر بود و بقصر قامت موصوف وبکراهت
هیات معروف و بنابر انکه طوایف انسان
صورت اورا نه بینند چهرهٔ از زر طلای احمر
ترتیب نموده بر روی خود میکشید بدان
سبب اورا مقنع لقب داده بودند و
هاشم نیز از جملهٔ القاب آن شقاوت مآب
است و مقنع نخست در مرو ظهور نموده
آخر الامر بماوراء النهر شتافت و بنواحی
شهر کش در قلعهٔ منیع متحصن گشته جمعی
از مردم که ایشان را سفید جامکان میگفتند
متابعتش کردند و آن ملعون دعوی
الوهیت نموده بر زبان می آورد که حضرت

باری عز و علا مصور بصورت آدم گشت
ازان جهت ملائکه پیش ابوالبشر سر
بسجده نهادند و بعد ازان بصورت دیگر
انبیا و علماء و حکماء و حکام متصور می شد
تا نوبت با بومسیلم رسیده و حالا در من
حلول نموده

WEDNESDAY, 23RD NOVEMBER.

[10 A.M. TO 1 P.M.]

PERSIAN TRANSLATION.

MIRZÁ M. COWSER, Esq.; JAMSETJI PALANJI KAPADIA, Esq.

[The figures to the right indicate full marks.]

1. Translate either of the two passages— 50

(a) All are but parts of one stupendous whole,
Whose body nature is, and God the soul;
That, changed through all, and yet in all the same;
Great in the earth, as in the ethereal frame;
Warms in the sun, refreshes in the breeze,
Glows in the stars, and blossoms in the trees,
Lives through all life, extends through all extent,
Spreads undivided, operates unspent;
Breaths in our soul, informs our mortal part,
As full, as perfect, in a hair as heart:
As full, as perfect, in vile man that mourns,
As the rapt seraph that adores and burns:
To him no high, no low, no great, no small;
He fills, he bounds, connects, and equals all.
Cease then, nor order imperfection name:
Our proper bliss depends on what we blame.
Know thy own point: this kind, this due degree
Of blindness, weakness, Heaven bestows on thee.

(b) European authors have extolled this battle of Marathon to the seventh heaven, and they are in raptures about

the victories of the Greeks. From the plain description of Herodotus, after a careful perusal, we find that if the Greeks conquered in some places, the Persians were victorious in other places. That is clear enough. Unfortunately, some of the remaining tablets of the Behistun inscription having been effaced by the cruel hand of Time we are obliged to rely hitherto on the one-sided opinions of the Greeks, who are enemies of the Persians. Therefore whatever has been written against the Persians is not worthy of being entirely relied upon, for to do so would hot be doing justice to them. The reader must have seen that in many different battles, according to the Greeks themselves, the Persians were victorious; therefore, all the praise which has been bestowed on the Greeks by later European authors is, in my humble opinion, not wholly due to the Greeks.

2. Translate into English— 50

(a) در سال هزار و صد و چهل و یک حضرت
ظل‌اللهی آهنگ سفر هرات کرده بعد از
اجتماع عسکر بتهیّهٔ اسباب سفر در روز
چهارم شوال که چهل و شش روز از
نو روز انقضا یافته بود از ارض اقدس
نهضت فرموده اولنگ یاقوتی را که از
سبزهٔ زمردی طعنه بر چرخ فیروزه گون
میزد مقرّ دلیران لعل خفتان ساختند و
از آنجا کوچ بر کوچ عازم مقصد گشته
در تربت جام چند روز لنگر اقامت
انداختند و در آنمکان خبر رسید که هزار
نفر از افاغنه آمده و قلعه خرمند آباد

باخرز را محصور ساخته اند حضرت
ظل اللهی باسه چهار هزار نفر از دلیران
معرکهٔ کارزار به تعجیل تمام ایلغار نمود
بعد از ورود بآنمکان معلوم شد که افاغنه
برگشته اند باز بتربت جام مراجعت و
تحریک لوای آسمان ساکرده در منزل
کاریز بترتیب تیپ و قراول و تعیین طرح
و هراول و آرایش ساقه وسول و تسویهٔ
میمنه و میسره وقول پرداخت شب که
قراول ماه بادیده وران روشن ضمیر
انجم بدیده بانی معابر مدارات بر فراز
این نیلگون حصار بر آمد جمعی از سپاه
کار آگاه را بقراولی مأمور ساخته وخود
نیز بعد از طلیعهٔ نجر اعلای لوای منصور
کرد قراولان خبر رسانیدند که الله
یارخان باجمعیت تمام وارد کوسویه شده
آنحضرت اولا برای استمزاج شرحی
برؤسای ابدالی نکاشتهٔ کلک صلاح انگیز
و ایشانرا با طاعت ارشاد و تحریض نمود

آنجماعت جواب را حواله بزبان شمشیر
تیز کردند روز دیگر سر حوض دغا رود
مضرب خیام سپهر نمود کشته طلایه داران
مرّیخ صلابت و پاسبانان کیوان مهابت
آنشب بپاس داری ذیل جلادت بر
کمر زدند

(8) و محمد ابن سلیمان. بعد از چند
گاه که در مرو اقامت نمود از سلطان
اجازت طلبیده بحج رفت و چون از آن
سفر باز آمد بضبط اموال ویلایت بلخ
منصوب شد و در آن اوقات نسبت
بامیر قماج خدمات پسندیده بجای آورده
مقارن آن حال شرف الدین ابو طاهر
وفات یافت و امیر قماج هزار هزار دینار
از سلطان تقبّل نموده تا منصب وزارت را
بمحمد ابن سلیمان مفوض ساخت و لغار
بیک خلعت وزارت پوشیده امیر معزّی
درتهنیت اواین قطعه در سلک نظم کشید

صدر نیک اختر محمد بن سلیمان انکه هست
چون محمد دین پرست و چون سلیمان ملک دار

از نظام امراو شد شغل کیتی بانظام
وزنگار کلک او شد کار عالم چون نگار
باغ عالم را ز رسم اوپدید آمد درخت
سال دولت را بعهدا و پدید آمد بهار

BRANCH III.—MATHEMATICS.

MONDAY, 21ST NOVEMBER.

[10 A.M. TO 1 P.M.]

EUCLID AND GEOMETRICAL CONIC SECTIONS.

J. T. HATHORNTHWAITE, M.A.; JAMES JARDINE, M.A.

1. Show that the perimeter of an isosceles triangle is less than that of any equal triangle upon the same base.

2. If a straight line be bisected and produced to any point, the square on the whole line thus produced and the square on the part of it produced are together double of the square on half the line bisected and of the square on the line made up of the half and the part produced.

A straight line AB is bisected in C and produced to D, so that the square on AD is three times the square on CD, and CB is bisected in E; prove that the square on DE is three times the square on BE.

3. The opposite angles of a quadrilateral figure are together equal to two right angles; show that it can be inscribed in a circle.

Show also that the sum of the angles in the four segments of the circle exterior to the quadrilateral is equal to six right angles.

4. If a straight line be drawn parallel to one of the sides of a triangle, it shall cut the other sides, or those sides produced, proportionally.

If D be the middle point of the side BC of the triangle ABC, and any straight line be drawn through C meeting AD in E and AB in F, show that the ratio of AE to ED is double the ratio of AF to FB.

5. If a straight line stand at right angles to each of two straight lines at the point of their intersection, it shall also be at right angles to the plane in which they are.

P is a point equidistant from the angles A, B, C of a right-angled triangle of which A is the right angle, and D is the middle point of BC; prove that PD is at right angles to the plane of ABC.

6. Tangents drawn to the same branch of a conic subtend equal angles at the focus.

The chord of contact of tangents drawn from T meets the directrix corresponding to the focus S in Z; prove that TSZ is a right angle.

7. In a parabola $SY^2 = SP.\ SA$.

A circle is described on the latus-rectum as diameter and a common tangent PQ is drawn to the parabola and circle; show that SP, SQ make equal angles with the latus-rectum.

8. Perpendiculars SY, S′Y′ from the foci of an ellipse upon the tangent at P meet the tangent in a fixed circle.

Prove that if from S′ a line be drawn parallel to SP, it will meet the perpendicular SY in the circumference of a circle.

9. From a point P of an hyperbola lines are drawn parallel to the asymptote to meet them in H, K; show that the rectangle PH. PK is invariable.

If a line through the centre meet PH, PK in R, T respectively, and the parallelogram PRQT be completed, show that Q is a point on the hyperbola.

10. Show that all sections of a right cone made by planes which meet the cone on both sides of the vertex are hyperbolas.

MONDAY, 21ST NOVEMBER.

[2 P.M. TO 5 P.M.]

ALGEBRA AND TRIGONOMETRY.

J. T. HATHORNTHWAITE, M.A.; JAMES JARDINE, M.A.

1. Investigate the greatest and least numbers which contain a given number of digits in any proposed scale of notation.

2. Enunciate the *exponential theorem.*

Hence show that—

$$\overset{r}{n} - n\,\overset{r}{(n-1)} + \frac{n\,(n-1)}{\underline{|2}}\,(n-2)^r$$
$$- \frac{n\,(n-1)\,(n-2)}{\underline{|3}}\,(n-3)^r + \ldots\ldots\ldots$$
$$= 0 \text{ if } r < n \text{ and } = \underline{|n} \text{ if } r = n.$$

3. Investigate the sum of n terms of a series of which the nth term is—

$$\{an + b\}\ \{a\,(n+1) + b\}\ \{a\,(n+2) + b\} \ldots\ldots\ldots\ldots\ldots\ldots$$
$$\{a\,(n + m - 1) + b\}.$$

Find the sum of—

$$1.\,2.\,3 + 2.\,3.\,4 + 3.\,4.\,5 + \ldots\ldots\ldots\ldots\ldots + n\,(n+1)\,(n+2).$$

4. If n be a prime number and N prime to n show that $N^{n-1} - 1$ is a multiple of n, and hence that $N^n - N$ is divisible by $6n$ if $n > 3$.

5. The probability of the occurrence of an event in one trial being known, investigate the probability of its happening exactly r times in n trials.

From a pack of 52 playing cards a single card is taken at random 5 times and replaced at random after each operation; what is the chance of the ace of spades being taken exactly 3 times?

6. In a semicircle ABC whose centre is O and radius r the straight line OB is drawn inclined at an angle $2a$ to the diameter, and circles are described in the triangles OAB, OCB; show that the distance between the centres of these circles is—

$$\left\{\frac{2 - \sin 2\,a}{(1 + \sin a)\,(1 + \cos a)}\right\}^{\frac{1}{2}} r.$$

7. State and prove *De Moivre's Theorem.*

Prove that—

$$\left\{\cos\theta + \cos\phi + \sqrt{-1}\,(\sin\theta + \sin\phi)\right\}^n$$

$$+ \left\{ \cos\theta + \cos\phi - \sqrt{-1}\,(\sin\theta + \sin\phi) \right\}^n$$
$$= 2^{n+1} \left(\cos\frac{\theta-\phi}{2}\right)^n \cos\frac{n(\theta+\phi)}{2}.$$

8. Resolve $x^{2n} - 2x^n \cos\theta + 1$ into its component factors.

9. Investigate expressions for the angular radii of the circles inscribed in and described about a given spherical triangle, and if the triangle be equilateral show that the tangent of the former is half the tangent of the latter.

10. In any polyhedron show that the number of solid angles together with the number of plane faces exceed the number of edges by 2.

TUESDAY, 22ND NOVEMBER.

[10 A.M. TO 1 P.M.]

NEWTON'S PRINCIPIA AND ASTRONOMY.

J. T. HATHORNTHWAITE, M.A.; JAMES JARDINE, M.A.

1. Enunciate and prove Newton's 5th Lemma.

2. State and prove the 10th Lemma.

What is the form of the curve of construction if the space described in a given small element of time ultimately vary inversely as the time which has elapsed since the commencement of the motion?

3. The centripetal forces by which bodies describe different circles with uniform velocities tend to the centres of the circles, and are as the squares of the arcs described in the same time divided by the radii.

If the periodic time in such an orbit vary as the nth power of the radius, show that the force varies inversely as the $(2n-1)^{th}$ power of the radius.

4. Show that any conic section may be described by the action of a force tending to a point at an infinite distance and varying inversely as the cube of the ordinate.

5. Find the law of force tending to a focus under the action of which a body describes an hyperbola.

6. Show that the varying *N. P. D.* and meridian altitude of the sun may be accounted for by the orbital motion of the earth.

7. What is the latitude of a place with the horizon of which the ecliptic can coincide? At what time of the day does this happen for such a place?

8. Define *annual parallax* and investigate its effect on the apparent path of a star during a sidereal year.

9. Explain the cause of *eclipses*, and investigate the greatest and least possible number of eclipses in a year.

Having given that the line of nodes of the moon's orbit makes a complete revolution in a retrograde direction in 6799·5 days and that the length of a lunation is 29·53 days, prove that eclipses will recur in an invariable order after 223 lunations.

10. Trace the apparent motion of an inferior planet, and investigate the angle of elongation from the sun at which it appears stationary.

TUESDAY, 22ND NOVEMBER.

[2 P.M. TO 5 P.M.]

ANALYTICAL GEOMETRY AND DIFFERENTIAL AND INTEGRAL CALCULUS.

J. T. HATHORNTHWAITE, M.A.; JAMES JARDINE, M.A.

1. Interpret carefully the equation—

$$\beta\gamma \sin A + \gamma\alpha \sin B + \alpha\beta \sin C = 0.$$

Show that if from any point of the circle which circumscribes a triangle perpendiculars be drawn to the sides of the triangle, the feet of the perpendiculars are in a straight line.

2. Prove that the straight lines joining the origin with the points of intersection of the curves—

$$Ax^2 + Bxy + Cy^2 + Dx = 0$$

$$ax^2 + bxy + cy^2 + dx = 0$$

will be at right angles to each other if

$$d(A + C) = D(a + c).$$

Investigate the equation to a conic passing through these points of intersection, and write down the equation when the conic is an equilateral hyperbola.

3. Show that a straight line drawn through the intersection of two tangents to a conic is divided harmonically by the curve and chord of contact

4. Describe the process of investigating the maxima and minima values of a function of several variables by the method of *indeterminate multipliers.*

In a given sphere inscribe the greatest possible rectangular parallelopiped

5. The equation to a curve being given in polar co-ordinates, investigate the condition for the existence of a *point of inflection.*

Find a point of inflection on the curve—

$$\theta^{\frac{1}{6}} = a$$

6. Find the envelope of all ellipses which have the same centre and in which the line joining the ends of the axes is of constant length.

7. Trace the lemniscate—

$$r^2 = a^2 \cos 2\theta$$

and find the area of a loop.

8. How do you find the volume of a solid of revolution? Find the volume of the solid generated by the revolution of the cycloid—

$$x = a(1 - \cos\theta) \qquad y = a(\theta + \sin\theta)$$

about its axis.

9. If $\Gamma(n)$ denote $\int_0^\alpha e^{-x} x^{n-1} dx$ where n is a proper fraction, show that—

$$\Gamma(n)\,\Gamma(1-n) = \frac{\pi}{\sin n\pi}$$

and deduce the value of $\int_0^\alpha e^{-ax^2} dx.$

10. Explain how the integral calculus is applied to questions of *mean value.*

Show that the mean value of the areas of all the triangles which have the same perimeter $2s$ is $\frac{4\pi s^2}{105}$

WEDNESDAY, 23RD NOVEMBER.

[10 A.M. TO 1 P.M.]

STATICS AND DYNAMICS.

J. T. HATHORNTHWAITE, M.A. ; JAMES JARDINE, M.A.

1. Determine the condition of equilibrium of a particle acted on by any forces and constrained to remain on a smooth plane curve.

A particle rests on an ellipse and is acted on by forces λx^n, μy^n parallel to the axes; find its position of equilibrium, and examine your result when $n = 1$.

2. A number of forces act on a rigid body in any directions; investigate the relation which must hold that they may have a single resultant.

3. Find the centre of gravity of the area contained between the curves

$$y^2 = ax \qquad\qquad y^2\ 2 = ax - x^2$$

which is above the axis of x.

4. Enunciate the law which regulates the relation between the stretched and unstretched lengths of an elastic string.

An elastic string is tied round two equal cylinders whose surfaces are in contact and axes parallel, the string not being stretched beyond its natural length. One of the cylinders is then turned through two right angles so that the axes are again parallel; find the tension of the string, supposing that a weight of 1 lb. would stretch it to twice its natural length.

5. The law of attraction being that of the inverse square of the distance, find the attraction of a circular arc on a particle at the centre of the circle.

What is the attraction on the particle of the solid generated by the revolution of the sector having this arc for its base about the radius which bisects the arc?

6. Investigate expressions for the component velocities of a particle parallel to the axes of co-ordinates.

A point moves in a plane, its velocities parallel to the axes of x and y being $u + ey$ and $u' + e'x$ respectively; show that it describes a conic section.

7. A particle of mass m describes a plane curve under the action of forces of which the components parallel to the tangent and normal are mT and mN; prove that

$$T = \frac{d^2s}{dt^2} \qquad N = \frac{1}{p} - \left(\frac{ds}{dt}\right)^2.$$

If ψ be the angle made by the tangent at any point of the path with a fixed line, show that the differential equation to the path is

$$\frac{d}{ds}\left(N\frac{ds}{d\psi}\right) = 2T.$$

8. A rigid bar of uniform density and given length is placed in the straight line joining two centres of force whose distance apart is given and whose intensities are in the ratio of 1 to 2; find the position of the bar so that it may rest in equilibrium, each force varying inversely as the distance.

9. A particle revolves in an orbit which is nearly circular and is acted on by a central force varying as any function of the distance; determine the apsidal angle, and show that the force cannot vary according to a higher inverse power of the distance than the third.

10. A particle acted on by no forces is projected in a resisting medium uniform density, of which the resistance varies as the nth power of the velocity; determine the motion.

WEDNESDAY, 23RD NOVEMBER.

[2 P.M. TO 5 P.M.]

HYDROSTATICS AND OPTICS.

J. T. HATHORNTHWAITE, M.A.; JAMES JARDINE, M.A.

1. State the position of the centre of pressure of a triangular lamina when immersed in liquid (1) with its base in the surface, (2) with its vertex in the surface and base horizontal.

A quadrilateral lamina ABCD in which AB is parallel to CD, is immersed in liquid with the side AB in the surface, and the centre of pressure is the point of intersection of the diagonals; show that $AB^2 = 3\ CD^2$.

2. A hemispherical shell is filled with fluid and held with its base upwards; show that when the whole pressure on the plane and curved surface is a maximum, the base is inclined to the horizon at an angle $\tan^{-1} 3$.

3. If the atmosphere be at rest under the action of gravity and the temperature remain constant, show that the pressure at a height z is $\Pi e^{-\frac{gz}{k}}$

Find the atmospheric pressure on a vertical rectangle of given dimensions, one of whose sides rests upon a horizontal plane.

4. Investigate the conditions of equilibrium of a solid body floating freely in a liquid.

A parabolic lamina 1 foot in height floats in a fluid of $\sqrt{8}$ times its density with its axis vertical; find the length of the axis immersed.

5. A vessel in the form of a surface of revolution is filled with water and has a small aperture made at its lowest point; determine its form so that the surface of the water may descend uniformly.

6. Investigate the geometrical focus of a small pencil of rays after direct refraction at a plane surface.

Three rods forming an equilateral triangle ABC are immersed in water with their plane vertical, A in the surface and BC horizontal; B′C being the geometrical image of BC and $\frac{4}{3}$ the refractive index of water, show that—

$$\frac{\text{radius of circle circumscribing triangle ABC}}{\text{radius of circle circumscribing triangle AB′C}} = \frac{48}{43}.$$

7. A pencil is obliquely reflected or refracted at a surface; investigate the position and magnitude of the *circle of least confusion.*

8. Show how to find the focal length of a system of lenses of known focal lengths whose axes are coincident and which are separated by given intervals.

If the lenses be all concave, each of focal length f, and such that the interval between the rth and $(r+1)^{th}$ lenses is equal to the distance of the focus after the rth refraction from the rth lens, and if the original pencil consist of parallel rays, prove that the distance of the nth focus from the nth lens is $\frac{2^{n-1}}{2^n-1}f$.

9. Two spheres are luminous and a small plane area is placed on the line joining their centres, its plane being perpendicular to this line. Find where it must be placed that its two surfaces may be equally bright.

10. A pencil of parallel rays is incident on a spherical rain drop and emerges after one internal reflection; investigate the angle of incidence for a minimum deviation.

MONDAY, 21ST NOVEMBER.

[10 A.M. TO 1 P.M.]

CHEMICAL PHYSICS—PAPER I.

The Rev. D. MACKICHAN, M.A., B.D.;
The Rev. F. DRECKMANN, S.J.

1. What is the axis of aoscillation of a compound pendulum? How is the length of the seconds pendulum determined by means of Kater's reversible pendulum?

Prove that supposing the earth to be a perfect sphere, the increment in the length of the seconds pendulum from the equator to the poles is proportional to the square of the sine of the latitude.

2. To what cause is the crystalline form of substances due? How can artificial crystals be procured? Name and shortly describe the six systems of crystallization, giving the relative position of the axes.

What relation exists between the crystalline form of a substance and its power of transmitting heat and light?

3. Describe accurately Cavendish's method of determining the mean density of the earth by means of the torsion balance, and indicate any other methods you know that have been used for the same purpose.

4. Give a short exposition of the mechanical theory of heat, and explain in accordance with this theory (*a*) Boyle's law, (*b*) Charles' law, (*c*) latent heat, (*d*) evaporation and its modification by different circumstances of temperature and pressure.

5. Ponillet observed that the heliometre exposed to the rays of the sun received in the same time different quantities of heat at different hours of the day; how did he explain this fact, and how did he employ it in determining the amount of heat absorbed by the atmosphere and the total amount of heat given out by the sun? Criticize his method.

6. Prove the law of Heron and Fermat, that light travelling from one point to another in reflexion and refraction follows that direction by which the passage is effected in the shortest time.

7. Show that a thin plate with parallel surfaces viewed in monochromatic reflected light appears bright or dark according as its thickness is equal to $\frac{(2m-1)\lambda}{4\,n.\,\cos\rho}$ or $\frac{(m-1)\lambda}{2\,n\cos\rho}$ where m is any integer, λ the wave length of the light in air, n the index of refraction between air and the plate, ρ the angle of refraction.

8. Describe and explain the phenomena of circular and rotatory polarisation; how is circularly polarised light obtained, and how is it distinguished from ordinary light? What is the transition tint (teint de passage)?

MONDAY, 21ST NOVEMBER.

[2 P.M. TO 5 P.M.]

CHEMICAL PHYSICS—PAPER II.

The Rev. D. MACKICHAN, M.A., B.D.;

The Rev. F. DRECKMANN, S.J.

1. Define *wave-motion* and describe particularly the nature of the wave-motion on which sound depends.

Explain and prove Newton's theorem that the velocity of sound in air is the same as the velocity which would be acquired by falling in vacuo through half the height of the homogeneous atmosphere.

Explain accurately Laplace's correction of this theorem, and the important results to which it leads.

2. Explain the composition of vibrations, and show under what conditions the path of a particle acted on by two waves the directions of which are at right angles to each other is a straight line, a circle, an ellipse.

Describe Linajon's method of graphically representing the composition of vibrations.

3. Define *node, ventral segment, stationary wave.*

Explain fully how a stationary wave is produced and maintained.

4. Define *electric density, difference of potential, equipotential surface.*

Describe the distribution of electricity on insulated conductors of different forms; and prove that it is impossible to collect any appreciable charge on a pointed conductor. Also show that while the electrifications of different parts of the same conductor acted on by inductive forces may be different, the *potential* of every part of it must be the same.

5. Define *inductive capacity* and show how it may be experimentally determined.

Obtain an expression for the energy of a jar of given capacity charged with a given quantity of electricity and show that when a charged and an uncharged jar have their inner coatings and outer coatings connected, the energy of the system is lessened. Explain this loss of energy in agreement with the theory of the conservation of energy.

6. Define *dielectric* and explain the theory of the action of a dielectric medium. What is meant by *strain* or *tension* in a dielectric? State some phenomena which confirm the theory of strain.

7. Prove that the total action of two magnets upon each other varies inversely as the cube of the distance, and show that when one of the magnets is at right angles to the magnetic meridian the other being free, the action is half that exerted by the same magnet held in the magnetic meridian.

8. Describe fully how the horizontal component of the earth's magnetism is determined on absolute measure.

Assuming the horizontal component of the earth's magnetism to be 0·15708 find what deflection will be produced by a *unit* current on a single coil of 40 centimetres radius used as a tangent galvanometer.

9. Give some account of the phenomena of *diamagnetism.* Explain how it may be ascertained whether their phenomena are due to diamagnetic polarity.

Describe and explain the behaviour of a feebly paramagnetic bar immersed in a strongly paramagnetic solution in the presence of a magnet.

TUESDAY, 22ND NOVEMBER.

[10 A.M. TO 1 P.M.]

CHEMISTRY, INORGANIC—PAPER I.

I. B. LYON, F.C.S., F.I.C.;

S. COOKE, M.A., F.I.C., F.G.S., Assoc. M. Inst. C.E.

[The figures to the right indicate full marks.]

1. By what properties is a metal distinguished from a non-metal? Arrange the following elements under the above heads, giving at the same time their maximum atomicities :— 8

Potassium, chlorine, phosphorus, sodium, arsenic, nitrogen, iron and selenium.

2. 1·74 grams of MnO_2 are taken for preparing chlorine which is passed into a solution of potassic iodide. How much iodine will be liberated? 12

3. Give examples of *direct* and *indirect* oxydizing and reducing agents. 8

4. Give the composition of the preparations used in preparing "matches which light only on the box". 8

5. Describe the varieties of phosphoric acid, and state how you would identify each variety. What tests would you employ for *free* phosphorus? 12

6. How would you distinguish between nitrates, nitrites and nitrides? 12

7. Describe the composition, preparation and properties of Condy's and Burnett's disinfecting fluids. 8

8. Describe and explain Pettenkofer's method for estimating the carbonic anhydride in air; which of the constituents of air does not support combustion, and what is its proportion by weight in the atmosphere? 12

9. Enumerate the products of the destructive distillation of bitumenous coal, which of them are the illuminating and which the heating agents of ordinary coal gas? How is the illuminating power of coal gas determined? 12

10. Name and describe at least three minerals in which glucina occurs as a constituent. 8

TUESDAY, 22ND NOVEMBER.

[2 P.M. TO 5 P.M.]

CHEMISTRY, INORGANIC—PAPER II.

I. B. LYON, F.C.S., F.I.C.;

S. COOKE, M.A., F.I.C., F.G.S., Assoc. M. Inst. C.E.

[The figures to the right indicate full marks.]

1. State what you know about the molecular heat of the compounds of the metals. 5

2. Write a short note on the law of periodicity of the elements. 5

3. In what minerals does lithium occur, how is the metal obtained, what are the chief chemical points of difference between lithium and the less rare alkali metals? 12

4. What is Weldon's process for the regeneration of manganese dioxide? In what different ways may the valuation of bleaching powder be effected? 12

5. Give a short account of the different methods in use for assaying silver. 12

6. Describe the composition, preparation and properties of the compounds of ammonium with the chlorides of mercury. 12

7. What classes of compounds does the metal uranium form? Mention one or two examples of each class. 12

8. Briefly describe the various methods of making steel. 15

9. Describe fully the oxides, hydrates, and chlorides of tin. 15

WEDNESDAY, 23RD NOVEMBER.

[10 A.M. TO 1 P.M.]

METEOROLOGY AND PHYSICAL GEOGRAPHY—PAPER I.

S. COOKE, M.A., F.I.C., F.G.S., Assoc. M. Inst. C.E.

[The figures to the right indicate full marks.]

1. Describe what, in your opinion, constitutes the province of Meteorology. 6

2. Trace the relationship between *the air*, *rain*, *frosts*, *springs*, *brooks*, *rivers* and *the sea*; and explain the influence of solar radiation in the production of some of the phenomena connected therewith. 12

3. What would be the probable temperature of the earth's surface were the sun extinguished? 10

Why is the temperature of elevated regions usually less than that of the surrounding plains?

4. Give a brief account of the effect on the earth's climate of a change in the eccentricity of its orbit. 12

5. Explain the phenomena of dew. What is hoar frost? Give Dr. Apjohn's formula and the necessary details for calculating the dew-point. 10

6. Sketch and describe the instruments in a self-recording magnetic observatory. 20

7. Give an account of the results obtained by recent researches in connection with the distribution of temperature on the earth's surface during former climatic periods. 20

8. State what you know of the origin of aerial and ocean currents. 10

WEDNESDAY, 23RD NOVEMBER.

[2 P.M. TO 5 P.M.]

METEOROLOGY AND PHYSICAL GEOGRAPHY—PAPER II.

S. COOKE, M.A., F.I.C., F.G.S., Assoc. M. Inst. C.E.

[The figures to the right indicate full marks.]

1. Describe the characteristic features of the volcanic cones called *lava-cones*, *tuff-cones* and *scoria-cones*. 12

2. Describe the conditions and causes which are likely to give rise to an excessive rainfall in a district, giving examples in illustration. 8

3. State the arguments for and against a belief in the fluidity of the interior of the earth. 10

4. Describe the composition and peculiarities of the different classes of meteorites and compare them with the earth's crust. 12

5. What do you understand by fringing coral reefs, atolls and barrier reefs? 10

In what regions do they most abundantly occur?

6. What do you understand by the geographical range of a species? Give examples in illustration. 6

7. Give the names of the characteristic mammals of tropical Africa, and contrast them with the corresponding mammals of Asia. 12

8. State the natural habitat and the present geographical distribution of the following economic plants :—rice, sugar-cane, tea. tobacco, maize. 10

9. Describe the recognised groups or families of the human race ; name the countries to which they naturally belong as well as those to which circumstances have compelled them to emigrate. 10

10. State Kepler's laws, and explain the equation of time. 10

VIII.

EXAMINATION FOR THE DEGREE OF LL.B.

EXAMINERS.

NANABHAI HARIDAS, LL.B.
H. C. KIRKPATRICK, M.A.

MONDAY, 21ST NOVEMBER.

[10 A.M. TO 1 P.M.]

ROMAN CIVIL LAW, ELEMENTS OF GENERAL JURISPRUDENCE AND INTERNATIONAL LAW.

NANABHAI HARIDAS, LL.B. ; H. C. KIRKPATRICK, M.A.

[The figures to the right indicate full marks.]

1. Define (*a*) Positive Law, (*b*) Positive Morality. In what respects are they analogous? How are positive moral rules distinguished from other laws? 10

2. Mention the various classes of laws which although really or apparently not imperative yet may be properly included within the province of jurisprudence? 8

3. What, according to Austen, is meant by the expression "law of opinion," and how did it originate? What is the essential difference of a "law of opinion," and how does that law differ from individual opinion? 8

4. With what meaning and under what circumstances was the term "equity" first adopted into the phraseology of jurisprudence? In what respects did the equity of the Roman law differ from that of English law, and what (if any) are the points of resemblance between them. 10

5. What general principles with regard to the navigation of rivers are now recognised by international law? What modern treaties regulate the navigation of the great rivers of Europe, and in what manner? 8

6. Distinguish the terms "intervention" and "interposition," and give instances of each of these two operations from history. 8

7. What part in the history of law do legislation, equity and legal fictions occupy? Give examples of legal fictions. 8

8. What were the policy and principal provisions of the *Lex Falcidia*, of the *Senatus Consultum Pegasianum* and of the *Senatus Consultum Trebellianum?* What changes did Justinian introduce into the law regulated by these statutes? 8

9. By what modes were servitudes created and extinguished under Justinian? Distinguish rural, urban, prædial, and personal servitudes. 8

10. Explain the contracts of *commodatum* and *mutuum*. In what cases were the persons receiving a thing as a *commodatum* liable for loss or damage? By what kinds of action were those contracts respectively enforced? 8

11. Mention the different kinds of adoption permitted by Roman law. What changes in the law of adoption were effected by Justinian? 8

12. Explain the following terms:—*Jus*, *persona*, *status*, *diminutio capitis*, *emphyteusis*, *usufructus*. 8

MONDAY, 21ST NOVEMBER.

[2 P.M. TO 5 P.M.]

SUCCESSION AND FAMILY RIGHTS WITH SPECIAL REFERENCE TO HINDU AND MAHOMEDAN LAWS.

NANABHAI HARIDAS, LL.B.; H. C. KIRKPATRICK, M.A.

[The figures to the right indicate full marks.]

1. A Hindu of one of the regenerate classes marries his mother's sister's daughter. For that act he is excommunicated by his caste. By that marriage he has two sons and a daughter. He dies, leaving, besides such children and their mother, a sister, a sister's son, a grandson of his great-grandfather, and a great-grandson of his great-great-grandfather. What are their respective rights to the property left by him? 10

2. A childless Hindu dies leaving two widows. One of the widows gives birth to a daughter four months after his death. The two widows divide their husband's property, moveable and immoveable, each taking a moiety. The childless widow thereafter dies, having made a will as to the moiety in her possession in favor of her father and brother. State the respective rights of the remaining widow, of her daughter, and of the legatees the father and brother. 10

3. A Brahman dies possessed of considerable property, moveable and immoveable, ancestral and self-acquired. The claimants to that property are four sons *A*, *B*, *C* and *D*, two widows, a favorite concubine, and a son by her. *A* embraced Christianity, and *B* Mahomedanism during his life-time, and were consequently excommunicated by the caste, and lived separate from him. *C*, having incurred his father's displeasure was turned out of the family-dwelling-house, but was allowed sufficient maintenance. The father has left a will expressly disinheriting *A*, *B* and *C*, leaving ¼ of the property to *D* and the remainder to the concubine's son. Provision is made in that will for the continuance of the maintenance to *C* and also for the maintenance of the two widows. State the respective rights of all the above persons under the circumstances. 10

4. State the effect of want of chastity upon the right of inheritance of a widow and of a daughter. Does it make any difference whether the want of chastity be previous or subsequent to the death of the husband or father? In what cases was this point decided? Which of them went to the Privy Council, and from what part of India, and what was the result there? 10

5. What were the facts and the ruling in *The Queen* v. *Rev. Robert Nesbitt?* Where is that case reported? 5

6. State the general rule as to who cannot be adopted. Do you know of any exceptions to that rule? What was the ruling in *Sree Brijbhookunjee* v. *Sree Gokoolootsuojee*, and where is that case reported? What are the respective rights of a duly adopted son and of a subsequently born son? 10

7. What is the age of majority of a person domiciled in British India? In what cases is the period of minority extended, and how far? What legislative enactment is there on this subject? How does it affect the period of minority under the Hindu and Mahomedan Laws? 10

8. To what wills by Hindus do the provisions of the Hindu Wills Act apply? If a Hindu resident of Ahmedabad makes a will, whereby he disposes of all his property, moveable and immoveable, situated in the Ahmedabad, Kaira, Broach, and Surat Collectorates, is it necessary, after his death, for the executors named in that will to obtain probate before they can sue for debts due to the estate of the testator or in respect of such property? 10

9 Define "Legal Sharers" and "Residuaries". Enumerate the causes of exclusion from inheritance according to Mahomedan Law, and state which of them have been removed by the Legislature, giving the enactments. 5

10. A Mahomedan dies leaving 4 widows, 2 daughters, 5 sons, 2 sons of a predeceased son, and 3 daughters of a predeceased daughter. What are their respective rights to any property left by him? 5

11. According to Mahomeden Law who can make a will, to what extent, and in whose favour? What is the extent of a Mahomedan's power of gift *inter vivos?* Define *Waqf.* By a Royal Sanad a village is granted in perpetuity to a pious Mahomedan for maintenance *(Madadimásh)*, and he is directed to say prayers for the benefit of the donor. Is the grant *Waqf* or *Altamgha?* In what respect does *Waqf* property differ from any other? 10

12. To whom do the provisions of the Indian Succession Act not apply? Where two clauses in a will are irreconcileable, which is it that prevails? Give instances of vested and contingent legacies. Show that a legacy may be vested in interest in the legatee and yet he may not be entitled to immediate payment or delivery. What difference is there between such a legacy and a contingent legacy?

TUESDAY, 22ND NOVEMBER.

[10 A.M. TO 1 P.M.]

THE LAW OF CONTRACTS, AND OF THE TRANSFER AND LEASE OF IMMOVEABLE PROPERTY.

NANABHAI HARIDAS, LL.B.; H. C. KIRKPATRICK, M.A.

[The figures to the right indicate full marks.]

Candidates are expected to give reasons for their answers.

1. What words are necessary to create an estate tail (*a*) by deed, (*b*) by will? What is a vested and what a contingent remainder? An estate is left to A for life and on his death to B for life, if B should then be living. Is B's estate vested or contingent? 8

2. A and B both claim certain land. A proves that he purchased it from C for Rs. 95 and he produces an unregistered deed of sale dated December 1877. B proves that he also purchased it from C for Rs. 98, and he produces a registered deed of sale dated March 1878. Which of them is entitled to succeed? 10

3. A, in consideration of Rs. 270, orally agreed to grant a lease of certain land to B, and he (A) accordingly executed a lease which B neglected to register. Subsequently A granted a lease of the same land to C and D upon terms more favourable to himself. C and D were aware of the previous agreement with B, but they obtained possession of the land and registered their lease. Could B enforce his claim as against C and D? 10

4. When in ordinary cases is freight payable under a charter party? In what cases is freight payable *pro rata itineris peracti?* Is there any objection to pay freight in advance, and in case of an agreement to do so what are the rights of the parties if the voyage be not performed? 10

5. Within what time must notice of dishonour of a Bill of Exchange be given, and to whom? Under what circum-

stances is notice dispensed with? When may the liability of an acceptor be said to be (1) satisfied, (2) extinguished, (3) discharged, (4) suspended?

6. What is the law with regard to the rights of transferees of stolen bills or notes? 6

7. Explain the nature of a policy of marine insurance. What warranties are implied on the part of the assured? What is meant by deviation? On what principle and to what extent does it affect the liability of the underwriter, and under what circumstances is it excused? 6

8. A, B and C jointly promise to pay D the sum of Rs. 5,000. C is compelled to pay the whole. A is insolvent, but his assets are sufficient to pay half of his debts: what are C's rights against A and B? 6

9. In the case of a contract for the purchase of goods deliverable by instalments, what is the effect (*a*) of default in the acceptance or delivery of an instalment, (*b*) of default in payment for an instalment, (*c*) of the insolvency of the buyer? 8

10. (*a*) A effects an insurance on the life of B in order to secure a debt due to him from B. On B's death his representatives having sufficient assets pay off A's debt. Can A recover the sum insured from the insurers? 10

(*b*) Is a tenant who has covenanted to repair, bound to rebuild premises which have been accidentally burned down? What is the liability of this tenant for rent during the remainder of his term?

11. A is induced to take shares in a company by the fraudulent misrepresentations of the Directors; what are his liabilities, rights and remedies?— 10

(*a*) When the company is a going concern.

(*b*) When the company is insolvent and in the course of winding up.

12. To what extent do the acts and contracts of one partner bind the firm? In particular discuss the effect of one partner selling or pledging the partnership property, giving a guarantee, referring a partnership dispute to arbitration, releasing a partnership debt. 8

TUESDAY, 22ND NOVEMBER.

[2 P.M. TO 5 P.M.]

EQUITY WITH SPECIAL REFERENCE TO THE LAW OF TRUST, MORTGAGES AND OTHER SECURITIES FOR MONEY, AND SPECIFIC RELIEF.

NANABHAI HARIDAS, LL.B. ; H. C. KIRKPATRICK, M.A.

[The figures to the right indicate full marks]

Candidates are expected to give reasons for their answers.

1. Discuss and illustrate the maxims— 10

(*a*) Equity follows the law.

(*b*) He who seeks equity must do equity.

(*c*) Equality is equity.

(*d*) Once a mortgage always a mortgage.

2. A buys land with notice of an incumbrance, and then sells it to B, who has no notice. B sells it to C with notice. Is the land bound in the hands of C? Give the reason on which the rule of the court is founded. 8

3. What are the leading rules which have been laid down for the interpretation of precatory words in a will? 8

4. A trustee placed trust money for safe custody in the hands of his own banker who shortly afterwards failed. Was the trustee liable? 8

5. A legal mortgage is made to A as a security for a sum of money expressed in the deed to have been advanced by A, but which was in fact advanced by B. A who has the custody of the mortgage deed deposits it as security for the advance of a sum (equal to that secured by the deed) made to himself by C, who has no notice that A is a trustee. A appropriates this money and becomes insolvent. Who is entitled to the money secured by the mortgage deed? 10

6. A trustee aliens the trust estate. Will the estate be still subject to the trust under any and what circumstances (*a*) if the alienee has given no consideration for it, (*b*) if the alienee has given a valuable consideration. 8

7. A mortgages an estate to his bankers as security for a balance then due to them from him and for any future advances which they may make on his account. A then 8

mortgages the same estate to B who has no notice of the bankers' security. They with notice of B's security afterwards make further advances to A. Are the bankers entitled as regards these advances to priority over B's mortgage? Would the bankers have priority if B had notice of their security?

8. B takes a transfer of a mortgage debt and security from A (the original mortgagee) paying a sum less in amount than the original mortgage debt. B brings a suit for foreclosure. For what sum will a person interested in the equity of redemption or having a charge on the estate subsequent to that of A be in general entitled to redeem? Are there any and what exceptions to the rule? 8

9. In what cases will a legacy by the same or different instruments be considered cumulative or substitutional? Is parol evidence admissible in determining the question? 8

10. B becomes surety for the payment of a debt by A on a day certain. The creditor afterwards agrees with A that the time for payment of the debt shall be extended, stipulating with A that B shall not be discharged from his suretyship. B is not a party to that transaction. Is he still bound by his agreement? 8

11. A engages with B to act at B's theatre for a certain number of nights at a fixed rate of remuneration. After fulfilling part of his engagement A refuses to act any more at B's theatre and contracts with C to act at his theatre for a part of the period during which he had agreed to act for B. B obtain relief to any and what extent? 8

12. Under the Indian Specific Relief Act (I of 1877) what contracts (*a*) may be specifically enforced, (*b*) cannot be specifically enforced? 8

WEDNESDAY, 23RD NOVEMBER.

[10 A.M. TO 1 P.M.]

THE LAW OF TORTS AND CRIMES.

NANABHAI HARIDAS, LL.B.; H. C. KIRKPATRICK, M.A

[The figures to the right indicate full marks.]

1. Define a *tort*. On what is the right of action *ex-delicto* founded? When may a private individual sue in respect of a public nuisance? State the effect of ratification of a tort. 10

2. Define *malice*. State what is necessary for the plaintiff to prove in an action for malicious prosecution? Distinguish between *libel* and *slander*. What words are actionable without proof of special damage? 10

3. When does an action lie for invasion of privacy? State briefly the facts and ruling in *Ashby* v. *White*. Explain what is meant by "No action will lie against a Judge for what he does judicially, though it should be laid *falsò malitiosè et scienter*." 10

4. State what Act was passed by the Indian Legislature for the protection of Judicial officers, and what are its provisions? What were the facts and ruling in the celebrated Darzi case, and who were the parties to it? 10

5. Show by an illustration that where several persons are concerned in the commission of a criminal act, they are not necessarily guilty of the same offence. Enumerate the punishments to which offenders are liable under the criminal law of British India. Who are incapable of committing offences? 10

6. What do you understand by the Right of Private Defence? State the cases in which the right does not exist, and the extent of it where it does exist. When does it extend to causing death? 10

7. A theft is committed by A, a subject of His Highness the Nizam, at Hyderabad in the Deccan. A part of the stolen property is made over by him at Sholápur to his friend B, a native subject of Her Majesty the Empress of India, who, knowing of the theft, dishonestly receives it. B conveys it to Poona, and disposes of it there. What offence, if any, is B guilty of? 10

8. Define the offence of giving false evidence, and state how far the "materiality" of a statement charged to be false is important. Define culpable homicide, and state when it does not amount to murder. What punishment does the law provide for murder? 10

9. Define "grievous hurt". When is a man guilty of the offence of "voluntarily causing grievous hurt"? Distinguish kidnapping from abduction. What punishment does the law provide for rape? 10

10. A, a Brahman, has sexual intercourse with a Dhed woman, or eats beef, or drinks spirituous liquor, or eats with Europeans or Mahomedans or Pársis. B, another Brahman, communicates the fact to the headman of the caste for such 10

notice as the caste may think fit to take of the matter. The headman sends a circular to the different members of the caste, intimating the same and asking them to assemble at the usual place and hour to consider the matter. They assemble accordingly, and, after questioning A, pass a resolution excommunicating A, unless he performs a prescribed penance in the presence of the headman within a week. A refuses to perform the penance, and the headman, by an officer of the caste, gives intimation thereof to all the members of the caste. A is excluded from all caste privileges. What offence, if any, is B, or the headman, or the officer, or the caste meeting, guilty of? Fully discuss the question.

WEDNESDAY, 23RD NOVEMBER.

[2 P.M. TO 5 P.M.]

THE LAW OF EVIDENCE, CIVIL PROCEDURE INCLUDING LIMITATION AND CRIMINAL PROCEDURE.

NANABHAI HARIDAS, LL.B.; H. C. KIRKPATRICK, M.A.

[The figures to the right indicate full marks.]

1. Define and give instances of *latent* and *patent* ambiguities, and state the rule as to the admissibility of extrinsic evidence to explain or remove them. 8

2. Define and give instances of— 8

(*a*) Direct evidence.

(*b*) Circumstantial evidence.

(*c*) Primary evidence.

(*d*) Secondary evidence.

(*e*) Privileged communications.

When is secondary evidence admissible? Explain the maxim "There are no degrees of secondary evidence." State the advantages of direct over circumstantial evidence, and *vice versâ*.

3. Explain "examination-in-chief," "cross-examination," and "re-examination". What questions may be put in cross-examination? When may a party cross-examine his own witness? How is the credit of a witness to be impeached? Is a witness compellable to answer criminating questions? How may a witness under examination refresh his memory? 9

4. What is the law of limitation now in force in India? What are the periods of limitation prescribed for the following suits and applications?— 9

Suits.

(*a*) To recover possession of immovable property under the Specific Relief Act 1877, Sec. 9.

(*b*) To set aside a sale in execution of a decree of a Civil Court.

(*c*) For compensation for slander.

(*d*) For money had and received.

(*e*) To redeem a mortgage.

(*f*) For possession of a hereditary office.

(*g*) For a declaration that an adoption is valid.

Applications.

(*a*) To set aside an award.

(*b*) To set aside an *ex-parte* judgment.

(*c*) For leave to appeal as a pauper.

(*d*) To substitute the names of the legal representatives of a deceased plaintiff or defendant.

5. How is the period of limitation for a suit to be reckoned in the following cases?— 3

(*a*) When the person entitled to institute it, is a minor, or insane, or both.

(*b*) When such disability continues up to his death.

6. State the effect, if any, upon limitation, of an acknowledgment, and the requisites of an acknowledgment to have such effect. State the effect, if any, of substituting or adding a new plaintiff or defendant after a suit is instituted. 3

7. When did the exemption of European British subjects from the jurisdiction of Civil Courts in the Mofussil of the Bombay Presidency cease to exist? State the provision of the Code of Civil Procedure on the subject of *res judicata*. State the procedure a defendant must adopt who wishes to have a suit transferred from one court to another. What remedy is there for rectifying any error in the decision of a Civil Court when no appeal lies to the High Court? 10

8. When, how, and on what grounds, may an *ex-parte* decree be set aside? When may a suit be disposed of at the first hearing? Who may apply for execution of a decree, 10

and to whom, and what particulars must the application contain? How may a decree for the recovery of a wife be enforced? Who may apply to set aside a sale in execution of a decree, and on what grounds?

9. Who may sue in *forma pauperis?* What suits cannot be so brought? When and how may a pauper be dispaupered? When may an interpleader suit be brought, and by whom? When, where, by whom, and to obtain what relief, may a suit relating to a public charity be brought? When may an Appellate Court remand a case? How is evidence to be taken of witnesses who are exempt from personal appearance in court? Can a Civil Court order a caste to re-admit an excommunicated member of it to caste privileges? 10

10. When a Magistrate finds that the accused has committed an offence which he has no jurisdiction to try, or for which he is not competent to commit, what is he to do? When a Magistrate of the second class having jurisdiction finds that an accused person is guilty, and considers him deserving of a more severe punishment than he can award, what is he to do? 6

11. How is the examination of an accused person to be taken down? When is an accused person to be discharged? Difference between a discharge and an acquittal. How can an improper discharge be set aside? Is there any remedy in case of an improper acquittal? If so, what is it? If a British subject, native or European, commits, at Baroda, an act punishable under the Indian Penal Code, how, where, and when may he be tried and punished for such act? What are the powers of an Appellate Court as regards the finding and sentence? When it finds the lower court had no jurisdiction, what is its duty? 12

12. What objections to a juror, if satisfactorily made out, must be allowed? In a trial with Assessors, with whom does the decision rest? In cases tried by jury in the Mofussil, state what should be done— 12

(*a*) If the jurors are unanimous, and the Judge concurs with them.

(*b*) If the jurors are not unanimous, and the Judge concurs with the majority.

(*c*) If the Judge differs from the jury, or agrees with the minority.

What is necessary before a sentence of death can be carried out? What remedy is there in case of an erroneous conviction against which no appeal is allowed by law?

IX.

FIRST EXAMINATION IN MEDICINE.

EXAMINERS.

T. Cody, L.R.C.P. ... ... W. K. Hatch, M.B. ...	In Anatomy, Descriptive and Practical.
H Cook, M D., M.R C.P. G. A. Maconachie, M.D., C.M.	In Physiology and Histology.
I. B. Lyon, F.C.S. ... ... S. Cooke, M.A., F.I.C., F.G.S., Assoc. M. Inst. C.E.	In Chemistry, including Practical Chemistry, General and Pharmaceutical Chemistry, and Detection of the adulteration of Drugs.
Sahkaram Arjun Ravut, L.M. J. Macgregor, M.D.	In Botany, Materia Medica, and Pharmacy.

MONDAY, 19TH SEPTEMBER.

[10 A.M. TO 1 P.M.]

ANATOMY.

T. CODY, L.R.C.P.; W. K. HATCH, M.B.

[The figures to the right indicate full marks.]

1. Into how many classes are the bones of the skeleton divided? Give as many illustrations as you can of each class. 20

2. Describe the cerebral surface of the base of the skull, and enumerate from behind forwards the bones composing it 20

3. Describe and give the attachments of the crucial ligaments of the knee joint. 20

4. Give the origin, insertion, and relations of the sterno-cleido-mastoid muscle. 20

5. What are the relations of the common carotid from its origin to bifurcation? 20

MONDAY, 19TH SEPTEMBER.

[2 P.M. TO 5 P.M.]

PHYSIOLOGY AND HISTOLOGY.

H. COOK, M.D., M.R.C.P; G. A. MACONACHIE, M.D., C.M.

[The figures to the right indicate full marks.]

1. What are the constituents of the urine? Give the histology of the kidney, and state in what manner the elements of the urine are secreted. 25

2. Describe fully the results that would follow section of the (5th) fifth nerve within the cranium. 20

3. Describe the sounds of the heart, and state what are their recognized causes. Give an ordinary sphygmographic tracing of the radial pulse, and state how much of the trace is correlative with the systole and how much with the diastole of the ventricle. 25

4. How is the eye enabled to see near and distant objects? Describe the muscular and nervous arrangements of the iris, and state what part this body takes in bringing about distinct vision. 20

5. Name and briefly describe the microscopical preparations numbered 1, 2 and 3. 10

TUESDAY, 20TH SEPTEMBER.

[10 A.M. TO 1 P.M.]

CHEMISTRY, &c.

I. B. LYON, F.C.S., F.I.C.

S. COOKE, M.A., F.I.C., F.G.S., Assoc. M. Inst. C.E.

[The figures to the right indicate full marks.]

1. Some *hard* waters can be softened by boiling, while others cannot. Explain the cause of this. Describe two other methods for softening waters. What tests would you apply to distilled water to detect impurities? 12½

2. A process similar to that used in the preparation of hydrochloric acid does not answer when applied to the preparation of hydriodic acid. State the cause of the difference, and describe how you would prepare pure hydriodic acid. How is it distinguished from hydrobromic acid? 12½

3. Describe the action of nitric acid on the metals bismuth, antimony and copper. Name the products in each case. 12½

4. How would you demonstrate the presence of sulphur in the gas known as sulphuretted hydrogen? 12½

5. How would you determine volumetrically the strength of a solution of free chlorine? State how you would prepare the standard solution you employ. 12½

6. What is lactic acid? How is it obtained? Write down the names and formulæ of the other known acids of the same series. 12½

7. What is chloral? What are its principal properties? 12½

8. What is supposed to be the molecular constitution of uric acid? What are its chief properties? 12½

TUESDAY, 20TH SEPTEMBER.

[2 P.M. TO 5 P.M.]

BOTANY, MATERIA MEDICA, AND PHARMACY.

SAKHARAM ARJUN RAVUT, L.M.; J. MACGREGOR, M.D.

[The figures to the right indicate full marks.]

1. Give the physiology and therapeutics of the Iron Salts, and mention as you go along any particular preparations adapted to special conditions of the system. 25

2. Name the Liquid Extracts of the Pharmacopœia, and give the Officinal names of the plants from which they are obtained. 15

3. Give the preparation and chemical properties of Morphia. 20

4. Mention and explain the different forms of Indefinite Inflorescence. 20

5. Define the following terms and give examples :— 10

(1) Orthotropous ovule, (2) Antitropous embryo, (3) Helicoid cyme, (4) Syconus, (5) Prothallium, (6) Conceptacle, (7) Dimorphism, (8) Fugacious, (9) Gibbous, (10) Gynostemium.

6. Refer Sago, Tapioca, Vegetable Ivory, Cardamoms and Tobacco to their respective Natural Orders, and give the essential characters of the Zingeberaceæ. 10

X.

EXAMINATION FOR THE DEGREE OF L.M. & S.

EXAMINERS.

H. COOK, M D., M R.C P. .. J. ARNOTT, M.D	In Principles and Practice of Medicine, including Pathology.
J. PINKERTON, M D. . .. . H. COOK, M.D. (Junior)	In Principles and Practice of Surgery, including Surgical Anatomy and Ophthalmic Surgery
A H HUGHES, M D. . . .. ATMARAM PANDURANG, G.G.M.C.	In Midwifery and Diseases of Women and Children.
I B. LYON, F.C.S ... KAIKHOSRU RASTAMJI VIKAJI, L.M., M D.	In Medical Jurisprudence, including Practical Toxicology and Hygiene.

MONDAY, 28TH NOVEMBER.

[10 A.M. TO 1 P.M.]

MEDICINE AND PATHOLOGY.

H. COOK, M.D.; J. ARNOTT, M.D.

[The figures to the right indicate full marks.]

1. Give the etiology and pathology of *cirrhosis of the liver*, and state what diseases of the lungs, stomach and kidneys present analogous pathological conditions. What are the signs and symptoms indicating the liver affection? 20

2 Describe the probable condition of a patient suffering from long standing disease of the *mitral valve*, giving the physical signs which accompany the complications, and the treatment you would adopt to relieve the more urgent symptoms. 20

3. Give the symptoms of *gastric ulcer* and state the diagnostic points to be sought for which enable you to discriminate between ulcer and *subacute gastritis*. What are the indications for treatment? 20

4. What are the causes of *hemiplegia?* State the particular symptoms which would lead you to diagnose a lesion in the lower half of the pons on the left side. 2

5. Give the distinctive points, both as regards the symptomatology and the etiology of *hydrothorax*, *empyema* and *pneumothorax*, and the indications for treatment in each state. How would you distinguish between a collection of fluid in the right pleura, and an enlarged liver, with consolidation of the base of the lung? 20

MONDAY, 28TH NOVEMBER.

[2 P.M. TO 5 P.M.]

SURGERY, SURGICAL ANATOMY AND OPHTHALMIC SURGERY.

J. PINKERTON, M.D.; H. COOK, M.D. (Junior).

[The figures to the right indicate full marks.]

1. Describe the process of ulceration. What are its most common local and constitutional causes, and give the treatment of a varicose ulcer? 30

2. Describe the causes, symptoms and treatment of hernia testis. 20

3. What constitutes an aneurism; name the different kinds and describe the operation of tying the subclavian artery at its third stage. 20

4. What are the usual causes of retention of urine in the aged, and what is the treatment required? 15

5. Give the symptoms and treatment of glaucoma. 15

TUESDAY, 29TH NOVEMBER.

[10 A.M. TO 1 P.M.]

MIDWIFERY AND DISEASES OF WOMEN AND CHILDREN.

A. H. HUGHES, M.D., M.R.C.S., ENG., L.R.C.P.E., L.M.E.;

ATMARAM PANDURANG, G.G.M.C.

[The figures to the right indicate full marks.]

1. What are the signs and symptoms of pregnancy from the commencement to the end of the 6th month? 20

2. Describe the treatment of shoulder presentation under the various circumstances in which it is met with. 20

3. State and explain the various means used to control hœmorrhage in *placenta pævia*. 20

4. AB was confined three months ago. Labour was said to have been natural. Lochia ceased on the tenth day. About the fifteenth day a sanguineous discharge appeared *per vaginam* which lasted for about five days, after which it ceased for two or three days, at the end of which time it re-appeared. In this manner it has continued off and on until the present time. What is your diagnosis and what is your treatment? 20

5. Describe the causes, symptoms and treatment of *trismus nascentium*, and state how it usually terminates. 20

TUESDAY, 29TH NOVEMBER.

[2 P.M. TO 5 P.M.]

MEDICAL JURISPRUDENCE AND HYGIENE.

I. B. LYON, F.C.S.; KAIKHOSRU RASTAMJI VIKAJI, L.M., M.D.

[The figures to the right indicate full marks.]

1. Give definitions according to the Indian Penal Code of (1) rape, (2) grievous hurt. 10

2. Write out a medico-legal report on the following case submitted to you for examination and opinion by a court of law :—The body of a traveller found dead suspended from a tree by the roadside of a public highway is submitted for examination and report as to the cause of death: Give facts necessary to prove that death was really due to hanging, discussing at the same time the probability of its being homicidal. 15

3. A married woman in her first pregnancy is accused after delivery of having become pregnant before marriage. How would you attempt to prove or disprove the charge? 10

4. A child gets poisoned by sucking lucifer matches. What symptoms would you expect to arise, and what are the methods by which the presence of phosphorus can be detected in the contents of stomach? 15

5. What are the circumstances that would justify you in asserting that a manufacture or factory in a large commercial city like Bombay is injurious to the health of those engaged in it or resident in the vicinity? 10

6. What is the appearance of flesh meat dangerously affected with trichiniasis; and what are the principal symptoms of trichinous disease in man produced by the use of diseased meat? 15

7. What are the usual causes of the non-detection of poisons in cases of death from poisoning. 10

8. Define the term homicidal monomania. What circumstances justify you in imposing restraint on the insane? 15

XI.

FIRST EXAMINATION IN CIVIL ENGINEERING.

EXAMINERS.

J. T. HATHORNTHWAITE, M.A. ...	In Mathematics.
T. S. TAIT, M.A., B.Sc.	
The Rev. C. F. H. JOHNSTON, M.A. ...	
FARDUNJI MANCHERJI DASTUR, M.A. ...	
I. B. LYON, F.C.S.	In Chemistry.
S. COOKE, M.A.	
The Rev. D. MACKICHAN, M.A., B.D. ..	In Experimental Physics.
The Rev. F. DRECKMANN, S.J. ...	
T. COOKE, M.A., M.I., LL.D. ...	In Engineering.
Major W. M. DUCAT, R.E.	

TUESDAY, 8TH NOVEMBER.

[2 P. M. TO 5 P. M.]

J. T. HATHORNTHWAITE, M.A.; T. S. TAIT, M.A., B.Sc.;
The Rev. C. F. H. JOHNSTON, M.A.;
FARDUNJI MANCHERJI DASTUR, M.A.

[The figures to the right indicate full marks.]

ALGEBRA.

(The same as set for the Previous Examination. See page lvii.)

ARITHMETIC.

8. Two sums, each of £138 2*s.* 6*d.* being due, one at the present time, and the other twelve months hence; how much ought to be paid six months hence to clear off both debts, interest being 4 per cent. per annum? 8

9. A merchant buys 1,260 quarters of corn, $\frac{1}{4}$ of which he sells at a gain of 5 per cent., $\frac{1}{3}$ at a gain of 8 per cent., and the remainder at a gain of 12 per cent.; if he had sold the whole at a gain of 10 per cent. he would have gained £23 2*s.* more. Find the cost price per quarter. 8

10. How do you find the logarithm of a product and of a quotient? 9

Given log 2 = ·3010300
log 7 = 8450980
Find log 196 and log $\frac{14}{2401}$.

WEDNESDAY, 9TH NOVEMBER.

[10 A.M. TO 1 P.M.]

EUCLID AND TRIGONOMETRY.

J. T. HATHORNTHWAITE, M.A.; T. S. TAIT, M.A., B.Sc.;
The Rev. C. F. H. JOHNSTON, M.A.;
FARDUNJI MANCHERJI DASTUR, M.A.

[The figures to the right indicate full marks.]

1. If the diagonals of any pentagon be drawn they will form by their intersection another pentagon. Prove that the sum of the perimeters of the two pentagons is less than the sum of the diagonals of the original pentagon. 7

[*N.B.*—The pentagon is not given equilateral.]

2. In a given triangle inscribe a circle. 9

If ABC be a triangle show that the circle through B, C and the centre of the circle touching BC and the other sides produced passes through the centre of the inscribed circle.

3. The sides about the equal angles of equiangular triangles are proportionals and those which are opposite the equal angles are homologous sides. 10

Show that the diagonals of a trapezium, two of whose sides are parallel, cut one another in the same ratio.

4. If two planes cut one another, their common section is a straight line. 10

Two points are taken on two walls which meet at any angle; find the shortest line which joins them and lies entirely in the walls.

5. Prove that for angles of any magnitude 8

$$\tan \theta = \tan (\pi + \theta).$$

Given $\tan \theta = \frac{5}{12}$, find the other trigonometrical functions of θ.

6. Find the sine of the sum of two angles in terms of the sines and cosines of the angles, each angle being less than a right angle and their sum greater than a right angle. 12

Given $\sin 5A \cos 3A = \sin 9A \cos 7A$, find A.

7. Transform the formula— 9

$$\tan (A + B) = \frac{\tan A + \tan B}{1 - \tan A \tan B}$$

into inverse notation.

Show that $\tan^{-1} \frac{3}{7} + 2 \tan^{-1} \frac{1}{3} = \frac{\pi}{4}$.

8. Having given in any triangle— 11

$$c^2 = a^2 + b^2 - 2\,ab \cos C.$$

$$2s = a + b + c.$$

Find the values of $\sin A$ and $\cos \frac{A}{2}$ in terms of the sides, giving the proper signs to any radicals that occur.

9. The side BC of a triangle is bisected in D; prove that— 12

$$2\,\text{AD}.\ \text{BC} = \sqrt{b^4 + c^4 - 2\,b^2c^2 \cos 2A}.$$

10. The sides of a triangle are $a - d$, a, $a + d$, and its area is $\frac{3\sqrt{3}}{20} a^2$; find its greatest angle. 12

WEDNESDAY, 9TH NOVEMBER.

[2 P. M. TO 5 P.M.]

STATICS.

J. T. HATHORNTHWAITE, M.A.; T. S. TAIT, M.A., B.Sc.;
The Rev. C. F. JOHNSTON, M.A.;
FARDUNJI MANCHERJI DASTUR, M.A.

(The same as set for the First B.A. Examination. See page c.)

TUESDAY, 8TH NOVEMBER.

[10 A. M. TO 1 P.M.]

DYNAMICS AND HYDROSTATICS.

J. T. HATHORNTHWAITE, M.A.; T. S. TAIT, M.A., B.Sc.;
The Rev. C. F. H. JOHNSTON, M.A.;
FARDUNJI MANCHERJI DUSTUR, M.A.

[The figures to the right indicate full marks.]

1. What experiments can you mention in support of the second law of motion 10

Prove that the unit of acceleration varies inversely as the square of the unit of time and directly as the unit of linear space.

2. Prove geometrically that $s = \frac{1}{2} f t^2$. 10

A body is projected vertically upwards with the velocity of 100 yards a minute; find how high it will go, and in what time it will return to the earth.

3. Two imperfectly elastic balls impinge directly upon each other; find the velocity of each after impact. 10

Also find the conditions that their velocities after impact may be interchanged.

4. Two bodies are projected at the same moment from the same point with a velocity of 16 feet per second, the one vertically upwards, the other vertically downwards; the latter strikes a perfectly elastic horizontal plane 12 feet below and then rebounds. Prove that both will return to the point of projection at the same time. 12

5. Find the range of a projectile on an inclined plane. 10

If the inclination of the plane to the horizon be 60°, what must the angle of projection be in order that the range may be as great as possible?

6. Define *specific gravity* and *density*. When are they the same? A piece of iron weighs 40 grammes in vacuo, 30 grammes in one fluid, and 35 in another; what will be its weight when immersed in a mixture of equal volumes of the two fluids? 10

7. Determine the conditions which must be satisfied that a body may float in equilibrium. 12

Show that if the density of a square board be to that of water as 3 to 4, it will float in a vertical plane with one angle in the surface of the water and one angle out of the water.

8. Find the whole pressure on the convex surface of a cone whose height is 36 inches and radius of base 15 inches, when immersed in water with its vertex in the surface and its axis inclined to the vertical at an angle of 45°. 10

9. Find the height of the homogeneous atmosphere supposing the height of the barometer to be 30 inches, the sp. gr. of mercury referred to water being 13·57 and the sp. gr. of water referred to air being 771. 7

10. Sketch and describe *Bramah's Press*. Find an expression for its mechanical advantage. 9

MONDAY, 7TH NOVEMBER.

[10 A.M. TO 1 P.M.]

INORGANIC CHEMISTRY.

I. B. LYON, F.C.S., F.I.C.;

S. COOKE, M.A., F.I.C., F.G.S., Assoc. M. Inst. C.E.

[The figures to the right indicate full marks.]

(*Section A.*)

1. What is ozone? How can it be obtained? What are its principal properties?

2. A mixture of gases is given to you containing oxygen, hydrogen and nitrogen in the proportion of equal volumes of each. How would you prove the proportion by volume in which the three gases exist in the mixture. Calculate also the respective weights of each of the three gases present in say 150 litres of the mixture measured at standards. 12

3. A salt is found to have the following percentage composition; calculate its formula, name it, and describe its chief properties:— 12

Sodium...	29·12
Sulphur	40·50
Oxygen	30·38
	100·00

Atomic weight of Sodium = 23.

4. What are the principal varieties of coal? What are their distinctive properties? 10

5. How can boracic acid be obtained? What is its composition? What are its principal properties? 8

(*Section B.*)

1. Three bottles of dry chlorine gas are given to you; describe the experiments you would make in order to show clearly the characteristic properties of this element. 10

2. Explain fully what is meant by the equation— 10

$$FeS + H_2SO_4 = FeSO_4 + H_2S.$$

and describe the properties of the gas set free.

3. Give the composition and describe the properties of the gases evolved when crystallized oxalic acid is heated with sulphuric acid; and explain how you would separate them. 10

4. Describe the processes employed in the preparation of phosphorus from bones, giving equations for the supposed re-actions. 10

5. Give the names and formulæ of some of the most frequently occurring *silicates*; and describe how silicon may be obtained in the crystalline condition. 10

MONDAY, 7TH NOVEMBER.

[2 P.M. TO 5 P.M.]

HEAT AND FRICTIONAL ELECTRICITY.

The Rev. D. MACKICHAN, M.A., B.D.;
The Rev. F. DRECKMANN, S.J.

[The figures to the right indicate full marks.]

1. Describe the air thermometer. What are its advantages and disadvantages as compared with the mercurial thermometer? What is the absolute zero of temperature and how is it arrived at? 10

2. Define *coefficient of expansion*, and show how the coefficient of apparent expansion of mercury is determined by means of the weight thermometer. 15

What must be the height of the mercury in a seconds pendulum compensated after Graham's method? [coefficient of linear expansion of glass for 100°C = 0·00086; coefficient of apparent expansion of mercury = 0·01548; length of seconds pendulum = 0·99 metre].

3. Define *specific heat*, and describe how it is measured by the method of mixtures. 12

Why is the specific heat of gases at constant pressure greater than their specific heat at constant volume?

4. Find the weight of one cubic metre of air at 21°C and 700 millimetres pressure if one litre of air at standard pressure and temperature weighs 1·293 grammes. 10

5. What is the effect of heat and pressure on saturated and non-saturated vapours? What is the *dewpoint?* Describe any one method of determining it. 14

6. Describe Volta's condensing electroscope, and show how very small quantities of electricity may be detected by it. 12

7. Show how to measure the charge of a Leyden jar by means of Lane's electrometer. 14

A battery of four Leyden jars charged by 100 turns of the electrical machine has a striking distance of 10 millimetres;

what will be the striking distance of a battery of eight similar jars charged by 160 turns?

8. Describe Wheatstone's method of determining the velocity of electricity. 13

In what direction does the discharge of a Leyden jar take place?

THURSDAY, 10TH NOVEMBER.

[10 A.M TO 1 P.M.]

ENGINEERING FIELD WORK.

T. COOKE, M.A., M.I., LL.D.; Major W. M. DUCAT, R.E.

[The figures to the right indicate full marks.]

1. Draw a diagonal scale of 10 feet to one inch to read hundredths. 10

2. Describe as accurately as you can a Gunter's chain. For what class of work is it particularly adapted, and why? Why are there always 3 or more small links between the long links of a surveying chain? 10

3. What is meant by a meridian in surveying? What meridian is worked to in a Prismatic Compass survey? 8

4. Draw a scale of degrees and divide a vernier for the same to read to minutes. 15

5. What is a bench mark in levelling? What is its object and how would you select one in practice? What is the meaning and object of a datum line in plotting a levelling survey? 10

6. What are the permanent and temporary adjustments of a Dumpy Level? 20

7. How would you fix the terminal and centre points of a curve of a given radius from the angle of intersection of its tangents? 15

8. What is a Clinometer? Describe DeLisle's Clinometer or any other that you know. 12

THURSDAY, 10TH NOVEMBER.

[2 P.M. TO 5 P.M.]

MATERIALS USED IN CONSTRUCTION.

T. COOKE, M.A., M.I., LL.D.; Major W. M. DUCAT, R.E.

[The figures to the right indicate full marks.]

1. Describe the method employed for blasting the Mont Cenis tunnel. 10

2. What methods have been adopted for the preservation of stone. 10

3. What three classes of brick earth are mentioned in the text book? Write a short description of a pug-mill for tempering brick clay. 10

4. What is the general proportion of lime and sand in ordinary mortar? 10

How much lime and sand will be required for 100 cub. feet of brick masonry?

5. Describe Treusart's apparatus for ascertaining the strength of mortars. 10

6. Describe the manufacture of Portland cement. What advantages has this cement over Roman cement? 10

7. Give Sir P. Cautley's rules for applying plaster. How does English plastering differ from plastering in this country? 10

8. Describe some of the methods in use for the artificial seasoning of timber. Which of the artificial processes is the best? 10

9. What methods have been employed to preserve timber from dry-rot and the attacks of insects? 10

10. What kind of clay should be used for making tiles? 10

Give a short description of the kiln used for burning tiles with approximate dimensions.

FRIDAY, 11TH NOVEMBER.

[10 A.M. TO 1 P.M.]

MASONRY.

T. COOKE, M.A., M I., LL.D. ; Major W. M. DUCAT, R.E.

[The figures to the right indicate full marks]

1. Explain the terms *ashlar*, *coursed rubble*, *uncoursed rubble*, *chamfer*, *quoin*. 10

2. Describe the "*American Derrick*" used for laying the concrete blocks for the light-house at Bombay. 10

3. How is scaffolding usually made ? What is the objection to the use of putlogs in brick masonry, and what difficulty exists in re-placing these by a double row of poles ? 10

4. What precautions should be observed in effecting repairs of masonry when new work is to be connected with old ? 10

5. What are the uses of counterforts, and how would you determine their size, shape and position ? 10

6. What are Rankine's practical rules for determining the thrust of a circular arch when not less, and when less than a quadrant ? 10

7. How would you describe a three centered arch, each arc being 60°. 10

8. Describe, with a sketch, any one of the excavators ordinarily employed for well foundations. 10

9. Describe the mode of constructing a coffer dam. What is the ordinary rule for the thickness of the dam as its depth varies ? 10

10 What are "Pierre Perdue" foundations and when are these adopted ? 10

FRIDAY, 11TH NOVEMBER.

[2 P M. TO 5 P.M]

ROADS AND EARTHWORK.

T. COOKE, M.A., M.I., LL.D. ; Major W. M. DUCAT, R.E.

[The figures to the right indicate full marks.]

1. Draw a neat hand-sketch of a metalled road 24 feet wide, without foot path in one foot cutting showing formation level and depth of metalling If you give any camber in the centre state why and your reasons for not making your camber greater or less than you have done. 12

2 Write a specification for good trap or basalt road metal in Poona. 8

3. How would you effect repairs to the surface of a first class metal road, which, though not worn through, is in need of thorough repair. 2

4. What is meant by "angle of repose"? Give the angles of repose of rock, hard moorum, and black soil in cutting

5. Draw to a scale of 10 feet to an inch a slab drain of one foot square water-way passing under a road 24 feet wide having its surface only one foot above ground, supposing that the watercourse runs six inches above ground and the level of the road is not to be raised. 20

6 What is meant by "ruling gradient"? What is usually the ruling gradient on hilly country in India? 8

7 In tracing a road over the Western Ghauts with a fixed ruling gradient would you begin your trace at the top of the Ghaut or the bottom, and why? Describe as fully as you can how you would proceed to trace a high class metal road over the Ghaut from the Konkan to the Dekhan, and what precautions you would take to prevent your losing your gradient round sharp spurs. 24

8. Is a zigzag or a very acute reversing angle on a Ghaut objectionable, and if so why? 8

EXAMINATION FOR THE DEGREE OF L.C E.

EXAMINERS.

J. T. HATHORNTHWAITE, M.A. T. S. TAIT, M A., B Sc. The Rev. C. F H. JOHNSTON, M.A FARDUNJI MANCHERJI DASTUR, M A.	In Mathematics.
I. B. LYON, F C S. S. COOKE, M.A.	In Chemistry and Mining and Metallurgy.
S. COOKE, M.A.	In Geology and Meteorology.
SAKHARAM ARJUN RAVUT, L.M. J. MACGREGOR, M.D. ...	In Botany.
The Rev. D. MACKICHAN, M.A., B D. The Rev. F. DRECKMANN, S.J.	In Experimenal Physics.
THEODORE COOKE, M.A , M.I., LL.D. Major W. M. DUCAT, R.E. ...	In Engineering.
Major W. M. DUCAT, R E. . E. B. CARROLL, Mem. Inst. C.E. .	In Mechanical Engineering.

TUESDAY, 8TH NOVEMBER.

[2 P.M. TO 5 P.M.]

MENSURATION OF SURFACES AND SOLIDS.

J. T. HATHORNTHWAITE, M.A.; T. S. TAIT, M.A., B.Sc.;
The Rev. C. F. H. JOHNSTON, M.A.;
FARDUNJI MANCHERJI DASTUR, M.A.

[The figures to the right indicate full marks.]

1. Wishing to ascertain the area of a circular race-course I walk round the inner ring of the course at the rate of 4 miles per hour and do the distance in 22 minutes, while a friend walks round the outer ring at the rate of 3 miles per hour and does the distance in 30 minutes. Find the area enclosed by the inner ring and also the breadth of the *course*. 10

2. A well is 12 feet diameter at the top and slopes uniformly so as to be 10 feet diameter at the bottom. The perpendicular depth of the well being 40 feet, find how many cubic feet of earth must have been excavated in making the well. 8

3. Supposing that that portion of a champagne bottle which contains the wine may be considered as a cylinder 6 inches in height and 11 inches in circumference: find how many wineglassfuls the bottle will contain, the glasses being hemispherical and $3\frac{1}{2}$ inches in diameter. 10

4. Prove that the volume of a sphere is two-thirds of that of a circumscribed cylinder. Also compare the areas of the surfaces of the sphere and cylinder. 8

5. A hollow cast-iron sphere 2 feet in diameter is able to float in water with its highest point just submerged. If the weght of one cubic foot of iron be $230\frac{170}{271}$ lbs., find the thickness of the shell. 10

6. Enunciate *Simpson's Rule* and apply it to find the area of the following figure:— 10

Ordinates 5; 10; 15; 20; 25 feet.

Common distance 1 foot 6 inches.

7. Two circles intersect. Given their radii and the distance between their centres, show how to find the area of the space common to both circles. 10

8. A uniform circular disc of wood 2 inches in diameter turns about a straight line distant 4 inches from its centre so as to form a solid ring. Find the area of the surface of the ring and also the volume of the ring. 10

9. The distance between Baroda and Bombay being 250 miles, and the circumference of the earth being 25,000 miles: find how high a man must ascend at Baroda in order to see Bombay. 10

10 The radius of the smaller end of a right cone is a and of the larger end $n\,a$. The height of the frustum is $m\,a$. Find the position of the plane parallel to the ends which will divide the frustum into two equal parts, showing that if x be the distance of this plane from the smaller end then 14

$$m\,a + (n-1)\,x = m\,a\sqrt[3]{\frac{n+1}{2}}.$$

WEDNESDAY, 9TH NOVEMBER.

[10 A.M. TO 1 P.M.]

CONIC SECTIONS.

J. T. HATHORNTHWAITE, M.A.; T. S. TAIT, M.A., B.Sc.;

The Rev. C. F. H. JOHNSTON, M.A.;

FARDUNJI MANCHERJI DASTUR, M.A.

[The figures to the right indicate full marks.]

1. Define a *conic* and show that tangents drawn to the same branch of a conic subtend equal angles at the focus. 6

2. Prove that the tangents at the extremities of a focal chord PSQ of a parabola, S being the focus, intersect at right angles at a point on the directrix. If Z be this point prove that SZ is perpendicular to PQ. 9

3. Prove that the focal distances of a point on an ellipse are equally inclined to the tangent at that point. 7

What will the angle of inclination be when the point is at one extremity of the minor axis and the length of the major axis is twice that of the minor?

4. Show that the semi-minor axis of an ellipse is a mean proportional between the perpendiculars from the foci on any tangent. 14

CR is the radius of the auxiliary circle drawn parallel to the focal distance SP, and SQ is drawn at right angles to CR; prove that QR. SP=BC ^{2}.

5. If P be any point on an hyperbola and CD be conjugate to CP, show that 14

$$SP.\ S'P = CD^2\ .$$

Prove that $(SP + AC)^2 - (S_1D + BC)^2$ = constant, where S, S_1 are the foci of the hyperbola and its conjugate nearest to P and D.

6. Find an expression for the distance between two points in a plane (1) when the co-ordinates of the points are given and the axes are oblique, (2) when the polar co-ordinates of the points are given. 8

7. The magnitude and position of the perpendicular from the origin on a line being given, find the equation to the line. What is the length of the perpendicular from the point (2, — 3) on the line $2x + 3y = 1$? 8

8. Investigate the equation of the straight lines bisecting the angles between the straight lines 15

$$\frac{x}{a} + \frac{y}{b} = 1 \qquad \frac{x}{b} + \frac{y}{a} = 1$$

and prove that the area of the triangle they make with either axis is $\dfrac{a^2\ b^2.}{(a + b)^2}$

9. Find the points in which the line $x + y = d$ will cut the circle 8

$$x^2 + y^2 - 2ax + a^2 - c^2 = 0$$

and deduce the condition that the line may become a tangent.

10. Find what loci are represented by— 11

(1) $xy = 0$

(2) $x^2 + y^2 - 6x + 2y + 10 = 0$

(3) $x^2 + y^2 - 6x - 8y + 16 = 0$

(4) $x^2 - y^2 - 6y - 9 = 0$.

WEDNESDAY, 9TH NOVEMBER.

[2 P.M. TO 5 P.M.]

STATICS AND DYNAMICS.

J. T. HATHORNTHWAITE, M.A.; T. S. TAIT, M.A., B.Sc.;
The Rev. C. F. H. JOHNSTON, M.A.;
FARDUNJI MANCHERJI DASTUR, M.A.

[The figures to the right indicate full marks.]

1. Enunciate and prove the proposition known as the *Polygon of Forces*. Is its converse true? If such a system of forces act in one plane but not at a point, what relation holds among them? 8

2 Show that the algebraical sum of the moments of two forces round any point in their plane is equal to the moment of their resultant. 8

Two or more forces act in one plane on a particle; prove that the algebraical sum of their moments round a point in the plane remains unchanged when the point moves parallel to a certain straight line.

3. Investigate the conditions of equilibrium of a heavy body placed upon a horizontal plane. 18

A frustum is cut from a cone by a plane bisecting the axis and parallel to the base; show that it will rest with its slant side on a horizontal plane if the height of the cone bear to the diameter of its base a greater ratio than $\sqrt{7}$ to $\sqrt{17}$.

4. State the *laws of friction*. 12

Upon an inclined plane whose inclination is $\frac{\pi}{4}$ the greatest horizontal force required for sustaining a weight is to the least in the ratio of 9 to 4; find the coefficient of friction.

5. Enunciate the *principle of virtual velocities* and prove it for the third system of pullies. 8

6. If a certain acceleration be denoted by f when 1 second is the unit of time and 1 foot the unit of length; how will the same acceleration be expressed when m sec. and n ft. are the units of time and length respectively? 8

The measure of gravity being 24 find the unit of time when the unit of length is a yard.

7. Determine the velocity and inclination to the horizon of the direction of motion of a projectile at any instant. 10

A body is projected horizontally with a velocity $4\,g$ from a point the height of which above the ground is $16\,g$; find the direction of motion when half the whole time of falling has elapsed

8 A spherical body impinges obliquely on another; determine the velocities after impact. From the formulae obtained how can you deduce the circumstances of impact of a body on a fixed plane? 8

9. Investigate the motion of two heavy bodies connected by a string which passes over a fixed smooth pully. 10

What weight must be added to the smaller weight so that the acceleration of the system may be of the same numerical value as before, but reversed in direction?

10. If a body describe a circle of radius r with uniform angular velocity ω, show that it is acted on by a force tending to the centre of the circle the acceleration of which is $\omega^2 r$. 10

MONDAY, 14TH NOVEMBER.

[2 P.M. TO 5 P.M.]

HYDROSTATICS.

J. T. HATHORNTHWAITE, M.A; T. S. TAIT, M.A., B.Sc.;
The Rev. C. F. H. JOHNSTON, M.A.;
FARDUNJI MUNCHERJI DASTUR, M.A.

[The figures to the right indicate full marks.]

1. What convention with regard to units is implied in the equation $W = g\,\rho\,V$? 10

If 27 oz. be the unit of weight, 1 yard the unit of length, and 10 sec. the unit of time, compare the density of the standard with that of water.

2. Show how to find the whole pressure of a liqud on a surface. 8

A rhombus is just immersed in liquid with a diagonal horizontal; compare the pressures upon the parts into which this diagonal divides it,

3. A hollow cone filled with liquid and closed is held with its axis horizontal; investigate the resultant pressure on the upper half of the curved surface. 12

4. Investigate the conditions of equilibrium of a floating body. 14

The weight of the unimmersed portion of a body floating in water being given, find the sp. gr. of the body in order that its volume may be the least possible.

5. Describe the *Barometer*. 8

The densities of mercury and water being as 13,568 to 1,000, what must be the length of a water-barometer inclined to the horizon at an angle of 30° when the mercurial barometer registers 30·5 inches?

6. Describe the *siphon manometer*, and show how to graduate its scale. 8

7. A bladder filled to one-eighth of its extent with atmospheric air is placed under the receiver of an air-pump, the capacity of the receiver being twice that of the barrel; after how many strokes will it be fully distended? 8

8. Describe the *atmospheric steam engine*, and give a diagram to illustrate its action. 8

9. Explain the principle and use of the *hydrostatic balance*. 12

A piece of wood weighs 12 lbs., and when attached to 22 lbs. of lead and immersed in water the whole weighs 8 lbs.; the sp. gr. of lead being 11 times that of water, determine the sp. gr. of the wood.

10. Investigate the form of the surface of a liquid which rotates uniformly about a vertical axis, and find the pressure at any point. 12

MONDAY, 7TH NOVEMBER.

[10 A.M. TO 1 P.M.]

INORGANIC CHEMISTRY.

I. B. LYON, F.C.S., F.I.C.;

S. COOKE, M.A., F.I.C., F.G.S., Assoc. M. Inst. C.E.

[The figures to the right indicate full marks.]

(SECTION A.)

1. Indicate briefly the various ways in which the chlorides of the metals may be prepared. 10

2. Define the terms oxidising agent and reducing agent. Illustrate your answer by examples. 10

3. What metals are known to form exceptions to the general law of vapour volumes? 6

4. Describe the preparation, composition and properties of the following:— 24

Common alum.

Bleaching powder.

Spongy platinum.

(SECTION B.)

1. Name and formulate the chief ores of copper, and describe how you would test an ore for copper. 10

2. What compounds of the metals are used as *pigments*, and describe the manner of preparation in each case. 10

3. Explain the so-called process of "setting" which takes place in mortar. Write a note on the chemistry of hydraulic mortars. 10

4. Explain the chemical differences between wrought iron, cast iron and steel. 10

5. Give the composition of clay and describe the essential properties of the clays used for bricks and pottery. 10

MONDAY, 7TH NOVEMBER.

[2 P.M. TO 5 P.M.]

HEAT, VOLTAIC ELECTRICITY AND MAGNETISM.

The Rev. D. MACKICHAN, M.A., B.D.;
The Rev. F. DRECKMANN, S.J.

[The figures to the right indicate full marks.]

1. Define and distinguish *conduction*, *convection* and *radiation*. State and describe the experimental facts on which the full identification of radiant heat and light depends. 12

2. Define the *unit of conductivity*, and explain fully how you would determine experimentally the conductivity of any given metallic bar. 14

Two bars of similar dimensions, one of iron and the other of bismuth, have each one extremity exposed to the same source of heat. Distinguish between the condition of the other extremities with respect to temperature (*a*) soon after the heat has been applied, and (*b*) when the bars have attained a state of equilibrium with respect to temperature.

3. State and illustrate fully the theory of exchanges. Explain how the specific heat of bodies is determined by the method of cooling. 11

4. Show how to determine the mechanical equivalent of heat from the ratio of the specific heat of air at constant pressure to the specific heat of air at constant volume. [Weight of one litre of air at standards = 1·293 gramme; specific heat of air at constant pressure = 0·237; ratio of the two specific heats = 1·42.] 16

5. Define *electromotive force*, *strength of current*, and *electrical resistance*. 15

Describe the construction of any one form of galvanic element and indicate briefly the chemical changes which take place when the circuit is closed. What is meant by the *polarization* of the plate and how is it got rid of?

6. Describe Thomson's reflecting galvanometer, and explain how you would employ it to measure the internal resistance of a cell. 14

When the current of a cell is passed through a galvanometer of resistance = 20 ohms, the deflection is measured by 45 divisions on the scale; when the binding screws are con-

nected by a shunt having a resistance of 10 ohms a deflection of 36 divisions is observed : find the internal resistance of the cell.

7. Define *magnetic moment*, *intensity of magnetization*, *paramagnetic* and *diamagnetic* bodies. 12

What are the magnetic elements of a place? What are their principal variations, and to what causes are they due?

8. Assuming that the earth's magnetism is produced by electric currents, show how to determine the direction of these currents. 6

TUESDAY, 8TH NOVEMBER.

[10 A.M. TO 1 P.M.]

GEOLOGY.

S. COOKE, M.A., F.I.C., F.G.S., Assoc. M. Inst. C.E.

[The figures to the right indicate full marks.]

1. Explain accurately the meaning of the following geological terms :— 10

Rock, outcrop, strike, dip, quaquâversal dip, anticlinal and synclinal axes.

2. Give the composition of the following minerals, and state the names of the formations in which they are most abundantly found :— 15

Felspar, apatite, calcspar, gypsum, mica, cassiterite, coal.

3. Name the localities in India where coal and iron-stone abound. Describe at least *three* of the fossils of the coal measures. 10

4. Draw an ideal geological section through the country lying between Goolburga and the Kistna Bridge. 10

5. Trace the development of the Oolitic system in Asia. And give the names of some of its characteristic fossils. 20

6. What species of fossils would prove a rock containing them to be of the Silurian period? 10

7. Draw up a table of the Tertiary Strata as recognized in Europe and name some of the fossils characteristic of each division. 25

THURSDAY, 10TH NOVEMBER.

[10 A.M. TO 1 P.M.]

ENGINEERING FIELD AND OFFICE WORK.

T. COOKE, M.A., M.I., LL.D; Major W. M. DUCAT, R.E.

[The figures to the right indicate full marks.]

1. Describe the process of adjusting for collimation in the case of a Y level and a Troughton's level, and explain how in practice the error in collimation in your level may be eliminated. 5

* 2. Rule the columns and fill in the headings of a Level Field Book on Sir J. McNeile's form and any one other form you know and from a fancy sketch, on the margin of your paper, of section of undulating ground fill in say a dozen readings of a level and reduce the results in both forms of book. 5

3. What is the meaning of the correction necessary for curvature and refraction, how are they calculated, how may they in practice be neutralized and rendered unnecessary, and within what limit of distance may they practically be disregarded as inappreciably small? 10

4. Describe the adjustments, temporary and permanent, of a Transit Theodolite. 8

5. In traversing with a Theodolite on any meridian what method is usually adopted for preserving the same meridian, and what are the advantages and drawbacks of such a survey? 5

6. In conducting as accurately as possible a traverse survey how would you prepare your work for plotting and how would you plot it? Rule a traverse sheet, enter the headings in the different columns, and explain all the checks and corrections that you would apply. 15

7. In observing at a station of a principle triangulation with a three verniered Everest Theodolite what precaution would you take in observing to eliminate all errors in the construction of your instrument? 15

8. In a complete net work of plane triangles forming a polygon round an observed central station describe all the checks on your angles that you can get. 15

9. Give some of the methods of finding the meridian with sufficient accuracy for ordinary engineering surveying. 15

10. What is a Planimeter, and describe the methods of using any one that you know of. 7

THURSDAY, 10TH NOVEMBER.

[2 P.M. TO 5 P.M.]

STRENGTH OF MATERIALS.

THEODORE COOKE, M.A., M.I., LL.D.;

Major W. M. DUCAT, R.E.

[The figures to the right indicate full marks.]

1. State some of the practical conclusions arrived at in Mr. Kirkaldy's recent experiments on the tensile strength of wrought iron and steel. 10

2. State Gordon's formula for the breaking weight of pillars and explain its advantages over Hodgkinson's formula. 10

3. In the case of a long pillar of solid round cast iron the working load on which is $5\frac{3}{14}$ tons uniformly distributed, and the length 16 feet, compare the results of Hodgkinson's and Gordon's formulæ for the least breadth required. The pillar is fixed at both ends. 12

4. Show how to cut the strongest and the stiffest beam out of a cylindrical log. 9

5. Find the breaking weight of a cast-iron girder 24 inches deep and 25 long between supports, the area of the bottom flange being 45 square inches. 10

6. Design a wrought iron girder of 20 feet span to carry a safe load of one ton to the foot run. 11

7. Give a rule for finding the thickness of the walls of a building of several stories and apply it in the case of a building 30 feet high and 20 feet wide divided into 3 stories of equal height. 12

8. Define bending moment and shearing stress. Give graphic sketches of both for distances 10 feet apart in a wrought iron girder 60 feet long whose depth is 5 feet, the dead and live loads being respectively $\frac{1}{2}$ ton and 1 ton per foot run. 15

9. If the maximum strain be taken at 51,520 lbs. per square inch, what pressure may be applied at the end of a crank 15 inches long to be transmitted by a shaft $9\frac{1}{2}$ inches in diameter? 11

FRIDAY, 11TH NOVEMBER.

[10 A.M. TO 1 P.M.]

BRIDGES.

THEODORE COOKE, M.A., M.I., LL.D.;
Major W. M. DUCAT, R.E.

[The figures to the right indicate full marks.]

1. Draw a plan half at foundation level and half at level of road-way of a stone bridge of three arches each of 60 feet span across a river, whose banks are 25 feet high sloping at 60° to the horizon with a road-way raised 10 feet above the natural level of the surrounding country. The arches should be segmental with a versine of 10 feet and the road-way 24 feet wide between parapets. The wing walls should be curved, and your plan should show the thickness of abutment and wing walls at base and of the latter at their top on the plan of road-way. The foundations may be assumed to be on a horizontal bed of rock 3 feet below bed of river in centre. 16

2. Draw a longitudinal section of the above bridge, showing the depth of your key-stone, and state how you obtained the depth of key-stone you have given. 12

3. Calculate and show on your section the height of the solid backing of the above arch, and state whether the backing should or should not be built before the centre is struck. 12

4. Of what use are the wing walls of a bridge and how would you calculate their section? 5

5. Supposing the wing walls of a bridge to have been well built and of good materials, but to have failed from faultiness of design, where would you expect failure in say three different ways, and what would be the effect of each method of failure on the stability of the bridge itself? 20

6. Describe the various methods of turning a brick arch say 18″ thick with ordinary bricks of 9″ × 4½″ × 3″. 5

7. Trace in single lines the outline of an iron lattice girder of 60 feet span, letter the points of junction of the braces, and denote which braces are in compression and which in tension when the girder is fully loaded. 15

8. In the tension boom of this girder, assuming the moment of resistance at a certain point to be 1,000 foot tons and the safe tension 5 tons per square inch of metal, give a plan of a length of 3 feet of the boom and a cross section through it showing rivets which may be taken as ¾″ diameter and give your calculations for the section of the metal. 15

FRIDAY, 11TH NOVEMBER.

[2 P.M. TO 5 P.M.]

IRRIGATION AND HARBOUR

THEODORE COOKE, M.A., M.I., LL.D ;
Major W. M DUCAT, R.E.

[The figures to the right indicate full marks]

1 What is the minimum velocity necessary in a canal to prevent the growth of aquatic plants and the deposit of silt? 10

2. How would you describe the curve of an Ogee fall? What is the effect of a fall occurring at the end of a canal reach? 10

3 What three methods have been resorted to in order to prevent inundations? 10

4 What are *bandels* and what are their defects? Describe Longmore's dredge for opening a channel through shoals when bandels had been already constructed. 10

5 Determine the dimensions of a uniform channel to discharge a given quantity of water with a given declivity. 10

6. Deduce an expression for the horizontal distance to which a cascade from the crest of a weir will leap in the course of a given fall below that crest. 10

7 What are groins? What length of river bank will a groin of given length protect, and what effect has a groin on the bottom of the channel? 10

8 What are the two kinds of stone bulwarks and what action has each on the waves? 10

9 What is a scouring basin and how should the outlets of such a basin face? 10

10 How does a dock differ from a basin, and how should the entrance to a dock from a river channel be placed with regard to the current? 10

SATURDAY, 12TH NOVEMBER.

[10 A.M. TO 1 P.M.]

SPECIFICATION AND ESTIMATING.

THEODORE COOKE, M.A., M.I., LL.D.;

Major W. M. DUCAT, R.E.

[The figures to the right indicate full marks.]

1. Write out a very careful specification for a contractor to work from, for a bridge of five arches of 60 feet span to be built across a river near Poona. The river which may be supposed to be dry during the building season has rock showing at one abutment, but this sheet of rock dips rapidly across the river so that at the other abutment there is 18 feet of a treacherous sandy loam, which is unsafe at any but a very low angle. The foundation and superstructure of the bridge and of the wing walls are of ashlar facing with good rubble hearting and the arching of stone, spandrel walls of coursed rubble, backing of concrete, parapet walls of ashlar masonry, string courses, coping, &c., of dressed stone. The contractor may find his own centring but the specification should regulate the striking of the centres and guard against loss or injury from faulty centres. With the above data write out carefully the "conditions of the contract" and a most minute specification for each item of such work as you think the contractor should do to ensure a first class structure without any avoidable risks during construction or loss or expense after the contract is completed. 75

2. Estimate in detail the cost of good uncoursed rubble masonry in Poona at the following rates, viz. :— 25

Rubble stone measured in the work at per 100 cubic feet	4	12	0
Broken lime stone delivered at the kilns on the site of work at per 100 cubic feet	8	0	0
Coal ditto at per ton (52 cubic feet)...	24	0	0
Wood ditto at per candy (27 cubic feet)	10	0	0

Sand unscreened free in the river bed 1½ miles from the work.

Cart-hire 9 annas per day.
Bullock per pair per diem 7 annas.
Coolies at 3 annas a day.
Masons 8 annas.
Water 6 annas per 1,000 gallons on the work.
All necessary tools and plant found free of charge.

MONDAY, 14TH NOVEMBER.

[10 A.M. TO 1 P.M.]

RAILWAYS.

THEODORE COOKE, M.A., M.I., LL.D.;
Major W. M. DUCAT, R.E.

[The figures to the right indicate full marks.]

1. In what proportion does the cost of executing brick-work in tunnels usually exceed that of executing the same above ground? 10

2. Describe with sketches the permanent way used on the Norwegian lines. 10

3. On what does the power of a locomotive depend? Deduce an expression for the available tractive force of an engine when ascending a gradient. 10

4. How would you set out Froude's curve of adjustment? 10

5. How would you set out the centre line and the levels underground in a tunnel? 10

6. Describe with a sketch Livesey's pot sleeper, also Ibbotson's clip. 10

7. Describe the "Reversing Triangle" and explain its use. 10

8. In the Fell centre rail railway, describe the method by which the adhesion of the train is obtained. 10

9 Describe the "bogey" and state its advantages. 10

10. Describe *tire brakes*, *skid brakes*, and *sledge brakes*. 10

TUESDAY, 15TH NOVEMBER.

[10 A.M. TO 1 P.M.]

ANALYTICAL GEOMETRY OF TWO DIMENSIONS.

J. T. HATHORNTHWAITE, M.A.; T. S. TAIT, M.A., B.Sc.

The Rev. C. F. H. JOHNSTON, M.A.;
FARDUNJI MANCHERJI DASTUR, M.A.

[The figures to the right indicate full marks.]

1. A circle always touches a given straight line and a given circle. Find the equation of the locus described by the centre of the circle 9

2. Find the equation of the normal at any point of the parabola $y^2 = 4ax$. Hence show that the sub-normal is of constant length. 9

3. Find the equation of the pair of tangents drawn from (h, k) to the parabola $y^2 = 4ax$, and deduce what the locus of (h, k) will be if tangents be at right angles. 10

4. Find the length of the perpendicular from the centre C of an ellipse $\frac{x^2}{a^2} + \frac{y^2}{b^2} = 1$ on the tangent at the point P in terms of a, b and b' where b' is the semi-diameter conjugate to PC; and apply your result to prove that the triangle formed by joining the extremities of conjugate diameters of an ellipse has a constant area. 11

5. Show that the co-ordinates of any point on an ellipse are given by $x = a \cos \phi$, $y = b \sin \phi$, and find the geometrical meaning of the angle ϕ. What corresponding method and geometrical interpretation can be given for the hyperbola? 9

6. From the equation to the ellipse $\frac{x^2}{a^2} + \frac{y^2}{b^2} = 1$ deduce the polar equation $r = \frac{a(1 - e^2)}{1 + e \cos\theta}$ the focus being the pole. 9

7. Define an hyperbola and from your definition find its equation. What is the eccentricity of $a^2 - \beta^{y^2} = \delta$? 9

8. Find the equation to the asymptotes of an hyperbola, and show that an asymptote of an hyperbola is also an asymptote of the conjugate hyperbola. 10

9. A given line AB is bisected in C and P is a point such that AP, CP, BP are in geometrical progression. Prove analytically that the locus of P is a rectangular hyperbola and sketch its position.

10 Find the equation to the ellipse when the axes are the tangent and normal at one end of the minor axis, and hence show that if through the origin two lines at right angles be drawn to meet the ellipse, the line joining their extremities will pass through a fixed point on the minor axis. 13

CCIXXXVI EXAM. FOR THE DEGREE OF L.C.E., 1881-82.

TUESDAY, 15TH NOVEMBER.

[2 P.M. TO 5 P.M.]

DIFFERENTIAL AND INTEGRAL CALCULUS.

J. T. HATHORNTHWAITE, M.A.; T. S. TAIT, M.A., B.Sc.;
The Rev. C. F. H. JOHNSTON, M.A.;
FARDUNJI MANCHERJI DASTUR, M.A.

[The figures to the right indicate full marks.]

1. Explain and illustrate the connection between a function and its differential co-efficient. Define a *limit* and find the limit of $\dfrac{\log_e (1 + x)}{x}$ when x is diminished indefinitely. 8

2. Find from first principles the differential co-efficient with respect to x of $\dfrac{a^2 + bx}{b - x}$ and $\sqrt{a^2 - x^2}$. 10

3. Differentiate $x \log \sin^{-1} \sqrt{1 - x^2}$, and find $\dfrac{dy}{dx}$ when $\log_x y - \log_y x = 0$. 11

4. If $u = y\,z$ where y and z are functions of x, find an expression for $\dfrac{d^3 u}{d x^3}$ and state what $\dfrac{d^n u}{d x^n}$ would be equal to. 10

5. If $\phi'(a) = 0$ and $\phi''(a)$ be negative prove that $\phi(a)$ is a maximum value of $\phi(x)$. 11

Find how a circle may be described with its centre on the circumference of a given circle so that the length of the arc intercepted within the given circle is a maximum.

6. Enunciate *Maclaurin's Theorem*, and apply it to find the expansions of e^x and $\sin x$. 10

7. How is the differential calculus applied to the evaluation of those fractions which take the form $\frac{0}{0}$ for particular values of the variable x? 10

Find the limit when $x = 0$ of $\dfrac{\cos ax - \cos \beta x}{\cos ax - \cos bx}$.

8. What is meant by *integration?* Show how the integral calculus may be applied to the finding of the area of a curve. 8

where an object must be
convex lens so that the image may be
and erect.

7. A source of light is placed at the focus of an el. the inner side of which can reflect light; prove that any ray after two reflections at the curve will return to the focus from which it started, and find the distance travelled.

8. Investigate the focal length of a lens which is equivalent to a combination of two lenses at a given distance from each other.

Find the focal length of the lens which is equivalent to two lenses of focal lengths f and $3f$ placed at a distance apart equal to the difference of their focal lengths.

9. Explain the principle of *Gregory's telescope* and find its magnifying power. 10

10. Describe the *eye* as an optical instrument. What do you mean by a short-sighted person and what kind of glasses should he use? 10

TUESDAY, 15TH NOVEMBER.

[2 P.M. TO 5 P.M.]

ASTRONOMY.

J. T. HATHORNTHWAITE, M.A.; T. S. TAIT, M.A., B.Sc.;
The Rev. C. F. H. JOHNSTON, M.A.;
FARDUNJI MUNCHERJI DASTUR, M.A.

[The figures to the right indicate full marks.]

1. By means of a figure show that the position of a star may be determined by any of these three systems of co-ordinates:— 6

(1) *Altitude* and *Azimuth.*
(2) *Declination* and *Right ascension.*
(3) *Polar distance* and *Hour angle.*

2. Show that the apparent motion of the sun among the stars may be accounted for by the orbital motion of the earth about the sun. 8

$\sqrt{x+1}$; $\dfrac{d\theta}{1+4\cos\theta}$; $\dfrac{x\,dx}{(1+x^2)\sqrt{1-x^4}}$.

What is meant by a *formula of reduction?* 10

Apply such a formula to find the values of—

$$\int_0^{\frac{\pi}{2}} \cos^{10}x\,dx \text{ and } \int_0^{\frac{\pi}{2}} \cos^{9}x\,dx.$$

TUESDAY, 15TH NOVEMBER.

[10 A.M. TO 1 P.M.]

OPTICS.

J. T. HATHORNTHWAITE, M.A. ; T. S. TAIT, M.A., B.Sc. ;
The Rev. C. F. H. JOHNSTON, M.A. ;
FARDUNJI MANCHERJI DASTUR, M.A.

[The figures to the right indicate full marks.]

1. When a pencil of light proceeding in one medium is incident on the surface of another medium it usually divides itself into three portions. Explain this, and state what becomes of these portions of light subsequently. 5

2. A straight rod is partly immersed in water; determine the angle at which it must be inclined to the surface that the apparent bending at the surface may be the greatest possible, the refractive index from water to air being $= \frac{3}{4} = \text{Sin } 48° \, 36'$. 13

3. A pencil of rays falls on a spherical mirror; show that if the mirror be convex the image is always virtual, and that if the mirror be concave the image is real or virtual, according as the distance of the object from the middle point of the mirror exceeds or falls short of a certain known length. 10

4. A luminous point is placed between two parallel mirrors; investigate the positions of the images produced. 8

5. If parallel rays pass through a prism of small refracting angle and the angle of incidence be also small, show that the deviation is proportional to the refracting angle. 10